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AIR OPERATING PERMIT NO. 000025-6

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and GPCM_P2_031506 Reopen Dec 2008.doc)

In compliance with the provisions of the State of Washington
Clean Air Act Chapter 70.94 Revised Code of Washington

GEORGIA PACIFIC CONSUMER PRODUCTS (CAMAS) L.L.C.
Camas, Washington

is authorized to operate in accordance
with the terms and conditions
of this Permit.

Issued by:

State of Washington
DEPARTMENT OF ECOLOGY
300 Desmond Drive
P.O. Box 47600
Olympia, Washington 98504-7600

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Industrial Section Manager

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INTRODUCTION AND LEGAL AUTHORITY

In Title 70, Chapter 94, Section 161 of the Revised Code of Washington, our State Legislature directs the Department of Ecology (Ecology) "...to require renewable permits for the operation of air contaminant sources." Ecology defined common elements of such required Air Operating Permits (AOP) to comply with goals of the Federal Clean Air Act (FCAA). Ecology published those permit elements in the Washington Administrative Code [Chapter 173-401 WAC]. An AOP prescribes emissions limitations, operating requirements, monitoring and recordkeeping requirements, and reporting frequencies for the permitted source.

The FCAA requires the Georgia Pacific Consumer Products (Camas) LLC (Georgia Pacific Camas Mill) to obtain a federal Title V Air Operating Permit because the facility emits or has the potential to emit during a year, one hundred tons or more of listed air pollutants. [WAC 173-401-300(1)]

Georgia Pacific Camas Mill uses the methods specified in this AOP to show its compliance with underlying air pollution control requirements. The permittee shall submit a report certifying its compliance with the terms and conditions contained in this AOP, in accordance with General Condition 37, including certifying compliance with all applicable requirements identified in Appendix D.

This Title V Air Operating Permit consists of all parts of this assembled document, including its Appendices and Footnotes, but does not include the accompanying Support Document, or any other or permits.

The definition of terms contained in WAC 173-401-200, or defined in any other referenced rule or regulations, apply to this permit unless otherwise defined in the AOP. All terms and conditions in this permit, except state-only requirements, are enforceable under the FCAA. State-only requirements are specifically identified in the permit.

EMISSION UNIT SPECIFIC REQUIREMENTS [WAC 173-401-600]

The emission units covered by Conditions A through V are subject to the following emission limits, and monitoring and reporting requirements. These units are also subject to the Facility-Wide General Requirements and the associated monitoring, recordkeeping and reporting requirements for these limits in the Facility-Wide section of this permit. The permittee may use an equivalent method with prior written approval from Ecology. Unless specified otherwise, the basis of authority for the type and frequency of monitoring imposed in Conditions A through V is WAC 173-401-615 or 630(1).

Insignificant emission units (IEUs) are subject to applicable requirements within the Facility-Wide section, but IEUs are not subject to testing, monitoring, recordkeeping, reporting or certification requirements unless the requirements in the State Implementation Plan (SIP) impose them. [WAC 173-401-530(2)(c)]

The reference test method (RM) is identified in the column titled "Monitoring and Reporting". Ecology also provided the compliance determination algorithm in Appendix C. The algorithm sets forth the manner by which emissions are calculated for those requirements when sing the Reference Method itself does not directly provide an emissions estimate. The permittee may use an equivalent method with prior written approval from Ecology.

A. No. 3 Kraft Recovery Furnace

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
A.1	PM_{10}	0.033 gr/dscf (0.075 g/dscm) @ 8% O_2 (average of 3 one-hour runs)	Sample monthly using EPA Method 5 or a test method approved in writing by Ecology. Report test results in the monthly report.[2] The permittee shall comply with Conditions A.6.a and A.6.b, intended to indicate compliance with the particulate limit and CAM requirements.	WAC 173-405-040(10) for the O&M requirements PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 1 40 CFR 64.2 CAM Requirements (See Section Q)
A.2	Opacity	Average 20% for more than 6 consecutive minutes in any 60-minute period	EPA Method 9 is the reference test method or a test method approved in writing by Ecology. The permittee shall comply with Conditions A.6.a and A.6.b, intended to indicate compliance with the opacity limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 2
A.3	SO_2	10 ppm @ 8% O_2, 24-hour average	EPA Method 6 or 6C is the reference method or a test method approved in writing by Ecology. Monitor monthly using an approved CEM that conforms to 40 CFR 60 (March 26, 1987), App. B, Perf. Spec. 2, and App. F.[3,6] The permittee shall monitor continuously an hourly average of scrubbing liquid pH at a minimum of 7 through the first stage of scrubber. Records of the hourly average for the pH will be maintained. Whenever an hourly average pH is below the specified range, the permittee will initiate corrective action within 24 hours. Failure to initiate corrective action within 24	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 3 WAC 173-405-040(10) for the O&M requirements

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
			hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report 1-hour average excursions and corrective action in the monthly report.	
A.4	NO_X	1.3 lb/ton (0.65 kg/Mg) of black liquor solids fired	Permittee shall conduct a source test, consisting of three one-hour runs, once each permit term. EPA Method 7, 7B, or 7E as prescribed in 40 CFR Part 60 (July 1, 1998) is the reference method to be used for NO_X measurement or a test method approved in writing by Ecology. During each test run the permittee shall record the No. 3 Recovery Furnace's operating conditions: black liquor solids (BLS) and/or auxiliary fuel fired, steam production rate, and excess oxygen level. Permittee shall maintain such records for the 5-yr period and be available upon request. Report test results and operating conditions within 60 days from the last sampling. NO_X emission factor is calculated using the most recent stack test results. Report results no later than 60 days after source test completion.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 4
A.5	TRS	5 ppm by volume on a dry basis @ 8% O_2, 12-hour average[7]	EPA Method 16 or 16A as prescribed in 40 CFR Part 60 (July 1, 1998) is the reference method or a test method approved in writing by Ecology. Monitor continuously using an approved CEM that conforms to 40 CFR Part 60 (March 26, 1987), App. B, Perf. Spec. 5, and App. F.[3,6] If the total number of contiguous periods of excess emissions in a quarter is less than one percent of the total number of operating hours (excluding periods of startup, shutdown, or malfunction) during the quarter, the excess emissions do not constitute a violation of this requirement. Report excursions in the monthly report.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 7
A.6.a	HAPs	Particulate surrogate: 0.044 gr/dsft (0.10 g/dscm) @ 8% O_2, hourly average (see Condition A.6.c)	Monitor pressure drop of the scrubber at least once every 15 minutes.[3,4] The pressure drop will be equal to or greater than 2 inches of water through the first stage of the scrubber. Begin corrective action, as specified in the SSM plan, when an excursion occurs (any 3-hr average out of compliance with pressure drop). A violation occurs when 6 or more 3-hr averages are out of compliance with pressure drop requirement during a 6-month reporting period. No more than one exceedence can occur per 24 hour period. Report excursions in the monthly report.	40 CFR 63.862(a)(1)(i) for HAP limit 40 CFR 63.864(e) for monitoring 40 CFR 63.864 (k)(1) for corrective action; 40 CFR 63.864 (k)(2) for violation definition; 40 CFR 63.864 (k)(3) for nunber of exceedences per period. 40 CFR 63.6(f) for SSM exclusion.
A.6.b			Monitor secondary power of ESP at least once every 15 minutes.[3,4] Maintain secondary power equal or greater than 40	40 CFR 63.862(a)(1)(i) for HAP limit 40 CFR 63.864(e) for

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
			kW on an hourly average. Begin corrective action, as specified in the SSM plan, when an excursion occurs (any 3-hr average out of compliance with power requirement). A violation occurs when 6 or more 3-hr averages are out of compliance with the power requirements during a 6-month reporting period. No more than one exceedence can occur per 24 hour period. Report excursions in the monthly report.	monitoring 40 CFR 63.864 (k)(1) for corrective action; 40 CFR 63.864 (k)(2) for violation definition; 40 CFR 63.864 (k)(3) for nunber of exceedences per period. 40 CFR 63.6(f) for SSM exclusion.
A.6.c	HAPs		If a source test exceeds the particulate surrogate concentration listed in condition A.6.a, permittee may use the PM overall compliance method described in 40 CFR 63.862(a)(ii) and 66 FR 3180 (January 12, 2001 or most recent version) to demonstrate compliance with the HAPS standard. The calculation must be made with the source test data from No. 3&4 recovery furnaces, and No. 3&4 smelt dissolvers, and the No. 4 lime kiln for the same month, if available, or most recent source test data, if data from the same month is not available.	40 CFR 63.862(a)(ii)

Note: Refer to Appendix G for footnotes' definition.

B. No. 4 Kraft Recovery Furnace

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
B.1	PM_{10}	0.033 gr/dscf (0.075 g/dscm) @ 8% O_2 (average of 3 one-hour runs)	Sample monthly using EPA Method 5 or a test method approved in writing by Ecology. Report test results in the monthly report.[2] The permittee shall comply with Condition B.6.a and B.6.b, intended to indicate compliance with the particulate limit and CAM requirements.	WAC 173-405-040(10) for the O&M requirements PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 1 40 CFR 64.2 CAM requirements (see Section Q)
B.2	Opacity	Average 20% for more than 6 consecutive minutes in any 60-minute period	EPA Method 9 is the reference test method or a test method approved in writing by Ecology. The permittee shall comply with Condition B.6, intended to indicate compliance with the opacity limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 2
B.3	SO_2	10 ppm @ 8% O_2, 24-hour average	EPA Method 6 or 6C is the reference method or a test method approved in writing by Ecology. Monitor monthly using an approved CEM that conforms to 40 CFR Part 60 (March 26, 1987), App. B, Perf. Spec. 2, and App. F.[3,6] The permittee shall monitor continuously an hourly average of scrubbing liquid pH at a minimum of 7 through the first stage of scrubber. Records of the hourly average for the pH will be maintained.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 3 WAC 173-405-040(10) for the O&M requirements

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
			Whenever an hourly average pH is below the specified range, the permittee will initiate corrective action within 24 hours. Failure to initiate corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report 1-hour average excursions and corrective action in the monthly report.	
B.4	NO_X	1.5 lbs/ton (0.75 kg/Mg) of black liquor solids fired	Permittee shall conduct *an annual* source test, consisting of three one-hour runs. EPA Method 7, 7B, or 7E as prescribed in 40 CFR Part 60 (July 1, 1998) is the reference method to be used for NO_X measurement or a test method approved in writing by Ecology. During each test run the permittee shall record the No. 4 Recovery Furnace's operating conditions: *BLS and/or auxiliary fuel fired, steam production rate, and excess oxygen level.* Permittee shall maintain such records for the 5-yr period and be available upon request. Report test results and operating conditions within 60 days from the last sampling. The NO_X emission factor is calculated using *the most recent* stack test results. Report test results no later 60 days after source test completion.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 4
B.5	TRS	5 ppm by volume on a dry basis @ 8% O_2, 12-hour average[7]	EPA Method 16 or 16A as prescribed in 40 CFR Part 60 (July 1, 1998) is the reference method or a test method approved in writing by Ecology. Monitor continuously using an approved CEM that conforms to 40 CFR Part 60 (March 26, 1987), App. B, Perf. Spec. 5 and App. F.[3,6] If the total number of contiguous periods of excess emissions in a quarter is less than one percent of the total number of operating hours (excluding periods of startup, shutdown, or malfunction) during the quarter, the excess emissions do not constitute a violation of this requirement. Report excursions in the monthly report.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 7
B.6.a	HAPs	Particulate surrogate: 0.044 (0.10 g/dscm) gr/dsft @ 8% O_2, hourly average	Monitor secondary power of ESP at least once every 15 minutes.[3,4] Maintain secondary power equal or greater than 125 kW on an hourly average. Begin corrective action, as specified in the SSM plan, when an excursion occurs (any 3-hr average out of compliance with power requirement). A violation occurs when 6 or more 3-hr averages are out of compliance with the power requirements during a 6-month reporting period. No more than one exceedence can occur per 24 hour period. Report excursions in the monthly report.	40 CFR 63.862(a)(1)(i) for HAP limit 40 CFR 63.864(e) for monitoring 40 CFR 63.864 (k)(1) for corrective action; 40 CFR 63.864 (k)(2) for violation definition; 40 CFR 63.864 (k)(3) for nunber of exceedences per period. 40 CFR 63.6(f) for SSM exclusion.
B.6.b			If a source test exceeds the particulate surrogate concentration listed in condition	40 CFR 63.862(a)(ii)

Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
		B.6.a, permittee may use the PM overall compliance method described in 40 CFR 63.862(a)(ii) and 66 FR 3180 (January 12, 2001 or most recent version) to demonstrate compliance with the HAPS standard. The calculation must be made with the source test data from No. 3&4 recovery furnaces, and No. 3&4 smelt dissolvers, and the No.4 lime kiln for the same month, if available, or most recent source test data, if data from the same month is not available.	

Note: Refer to Appendix G for footnotes' definition.

C. Bubble Emissions for No. 3 and No. 4 Kraft Recovery Furnaces

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
C.1	PM_{10}	The combined emissions from the recovery furnaces shall not exceed 328 tpy PM_{10}.	Calculate mass emissions, monthly. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 1
C.2	SO_2	The combined emissions from the recovery furnaces shall not exceed 46.2 tpy SO_2.	Calculate mass emissions monthly. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 3
C.3	NO_X	The combined emissions from the recovery furnaces shall not exceed 609 tpy NO_X.	Calculate mass emissions monthly. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 4
C.4	CO	The combined emissions from the recovery furnaces shall not exceed 2504 tpy CO.	Calculate mass emissions monthly. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 5 Order DE-1147
C.5	VOC	The combined emissions from the recovery furnaces shall not exceed 219 tpy VOC.	Calculate mass emissions monthly. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 6
C.6	TRS	The combined emissions from the recovery furnaces shall not exceed 12.7 tpy TRS.	Calculate mass emissions monthly. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 7

D. No. 3 Smelt Dissolver

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
D.1	PM_{10}	0.12 lb/ton (0.06 kg/Mg) of black liquor solids (dry weight), hourly average (average of 3 one-hour runs)	Sample monthly using EPA Method 5. Report test results in the monthly report.[2] The permittee shall comply with Condition D.4a, intended to indicate compliance with the particulate limit and CAM requirements.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 8 40 CFR 60.282(a)(2)(i) WAC 173-405-040(10) for the O&M requirements 40 CFR 64.2 CAM requirements (see Section Q)
D.2	Opacity	Average 20% for more than 6 consecutive minutes in any 60-minute period	EPA Method 9 is the reference test method or a test method approved in writing by Ecology. The permittee shall comply with Condition D.4.a, intended to indicate compliance with the opacity limit.	40 CFR § 60.11(c) PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 9
D.3	TRS	0.0168 lb/ton (0.0084 kg/Mg) of black liquor solids on a daily average	EPA Method 16A/6C is the reference method, or a test method approved in writing by Ecology. Report test results once per permit term. The permittee shall comply with Condition D.4.a, intended to indicate compliance with the TRS limit.	40 CFR 60.283(a)(4) WAC 173-405-(10) for the O&M requirements PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 12
D.4.a	HAPs	Particulate surrogate: 0.2 lb/ton (0.10 kg/Mg) of black liquor solids (dry weight), hourly average (see Condition D.4.b)	Monitor pressure drop, flow, and pH of the scrubber at least once every 15 minutes.[3,4] The pressure drop will be at least 3 inches of water, the flow rate through the first stage of the scrubber will be at least 2000 gallons per minutes, and pH will be at least 9. Begin corrective action, as specified in the SSM plan, when an exceedence occurs (any 3-hr average out of compliance with pressure drop, scrubber flow, or pH requirements). A violation occurs when 6 or more 3-hr averages are out of compliance with pressure drop, scrubber flow, or pH requirements during a 6-month reporting period. No more than one exceedence can occur per 24 hour period. Report excursions in the monthly report	40 CFR 63.862(a)(1)(i) for HAP limit 40 CFR 63.864(e) for monitoring 40 CFR 63.864 (k)(1) for corrective action; 40 CFR 63.864 (k)(2) for violation definition; 40 CFR 63.864 (k)(3) for nunber of exceedences per period. 40 CFR 63.6(f) for SSM exclusion.
D.4.b			If a source test exceeds the particulate surrogate concentration listed in condition D.4.a, the permittee may use the PM overall compliance method described in 40 CFR 63.862(a)(ii) and 66 FR 3180 (January 12, 2001 or most recent version) to demonstrate compliance with the HAPS standard. The calculation must be made with the source test data from No. 3&4 recovery furnaces, and No. 3&4 smelt dissolvers, and the No.4 lime kiln for the same month, if available, or most recent source test data, if data from the same month is not available.	40 CFR 63.862(a)(ii)

Note: Refer to Appendix G for footnotes' definition.

E. No. 4 Smelt Dissolver

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
E.1	PM_{10}	0.12 lb/ton of black liquor solids (dry weight), hourly average (average of 3 one-hour runs)	Sample monthly using DOE Method 8 or a test method approved in writing by Ecology. Report test results in the monthly report.[2] The permittee shall comply with Condition E.4.a, intended to indicate compliance with the particulate limit and CAM requirements.	WAC 173-405-(10) for the O&M requirements PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 8 40 CFR 64.2 CAM requirements (see Section Q)
E.2	Opacity	Average 20% for more than 6 consecutive minutes in any 60-minute period	EPA Method 9 is the reference test method or a test method approved in writing by Ecology. The permittee shall comply with Condition E.4.a, intended to indicate compliance with the opacity limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 9
E.3	TRS	0.0168 lb/ton (0.0084 kg/Mg) of black liquor solids on a daily average	EPA Method 16A/6C is the reference method, or a test method approved in writing by Ecology. Report test results once per permit term. The permittee shall comply with Condition E.4.a, intended to indicate compliance with the TRS limit.	WAC 173-405-(10) for the O&M requirements PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 12
E.4.a	HAPs	Particulate surrogate: 0.2 lb/ton (0.10 kg/Mg) of black liquor solids (dry weight)	Monitor pressure drop, flow, and pH of the scrubber at least once every 15 minutes.[3,4] The pressure drop will be at least 7.5 inches of water, the flow rate through the first stage of the scrubber will be at least 2000 gallons per minutes, and pH will be at least 9. Begin corrective action, as specified in the SSM plan, when an exceedence occurs (any 3-hr average out of compliance with pressure drop, scrubber flow, or pH requirements). A violation occurs when 6 or more 3-hr averages are out of compliance with pressure drop, scrubber flow, or pH requirements during a 6-month reporting period. No more than one exceedence can occur per 24 hour period. Report excursions in the monthly report.	40 CFR 63.862(a)(1)(i) for HAP limit 40 CFR 63.864(e) for monitoring 40 CFR 63.864 (k)(1) for corrective action; 40 CFR 63.864 (k)(2) for violation definition; 40 CFR 63.864 (k)(3) for nunber of exceedences per period. 40 CFR 63.6(f) for SSM exclusion.
E.4.b			If a source test exceeds the particulate surrogate concentration listed in condition E.4.a, the permittee may use the PM overall compliance method described in 40 CFR 63.862(a)(ii) and 66 FR 3180 (January 12, 2001 or most recent version) to demonstrate compliance with the HAPS standard. The calculation must be made with the source test data from No. 3&4 recovery furnaces, and No. 3&4 smelt dissolvers, and the No.4 lime kiln for the same month, if available, or most recent source test data, if data from the same month is not available.	40 CFR 63.862(a)(ii)

Note: Refer to Appendix G for footnotes' definition.

F. Bubble Emissions for No. 3 and No. 4 Smelt Dissolvers

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
F.1	PM_{10}	The combined emissions from the dissolver vents shall not exceed 47.8 tpy PM_{10}.	Calculate mass emissions monthly. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 8
F.2	SO_2	The combined emissions from the dissolver vents shall not exceed 28.0 tpy SO_2.	Calculate mass emissions monthly. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 10
F.3	VOC	The combined emissions from the dissolver vents shall not exceed 30.0 tpy VOC.	Calculate mass emissions monthly. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 11
F.4	TRS	The combined emissions from the dissolver vents shall not exceed 5.4 tpy TRS.	Calculate mass emissions monthly. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 12

G. No. 4 Lime Kiln

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
G.1	PM_{10}	0.13 gr/dscf (0.295 g/dscm) @ 10% O_2 when firing with fuel oil, or 0.067 gr/dscf (0.152 g/dscm)@ 10% O_2 when firing with natural gas, hourly average (average of 3 one-hour runs).	EPA Method 5 is the reference method. Sample monthly using DOE Method 8 or a test method approved in writing by Ecology. Report test results in the monthly report.[2] The permittee shall comply with Condition G.11, intended to indicate compliance with the particulate limit and CAM requirements.	60.282(a)(3)(i) of Subpart BB, 40 CFR Part 60 for basis of particulate limit when firing with fuel oil and natural gas. WAC 173-405-040(10) for the O&M requirement PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 13 40 CFR 64.2 CAM requirements (see Section Q)
G.2		88 tpy when firing with fuel oil, annual average 44 tpy when firing with natural gas, annual average.	Annual average value is calculated using actual emissions from previous stack test results. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 13

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
G.3	Opacity	Average 35% for more than 6 consecutive minutes in any 60-minute period	EPA Method 9 is the reference test method or a test method approved in writing by Ecology. The permittee shall comply with Condition G.11, intended to indicate compliance with the opacity limit.	WAC 173-405-040(6) PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 14
G.4	SO_2	500 ppmvd @ 10% O_2, hourly average	EPA Method 6 or 6C is the reference method or a test method approved in writing by Ecology. Monitor monthly using an approved CEM that conforms to 40 CFR Part 60 (March 26, 1987), App. B, Perf. Spec. 2, and App. F. Report excursions in the monthly report.	40 CFR 60.7(c), (d), (e), (f), and (h) for excess emission notification WAC 173-405-040(11)(a) WAC 173-405-040(10) for the O&M requirement
G.5		36.1 tpy annual average	Annual average is calculated using actual emissions from previous stack test results. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 15
G.6	NO_X	234 tpy annual average	Permittee shall conduct a source test, consisting of three one-hour runs once each permit term using EPA Method 7, 7B, or 7E is the reference method or a test method approved in writing by Ecology. During each test run the permittee shall record the No. 4 Lime Kiln's operating conditions: *lime mud flow rate, auxiliary fuel fired, and excess oxygen*. Report test results and operating conditions within 60 days from the last sampling. Annual average value is calculated using actual emissions from the most recent stack test results. Report results no later 60 days after source test completion.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 16
G.7	CO	1798 tpy annual average	EPA Method 10 is the reference method or a test method approved in writing by Ecology. Annual average value is calculated using actual emissions from *the most recent* stack test results. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 17
G.8	VOC	45 tpy annual average	EPA Method 25A is the reference method or a test method approved in writing by Ecology. Annual average value is calculated using actual emissions from *the most recent* stack test results. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 18
G.9	TRS	8 ppm by volume on a dry basis @ 10% O_2, 12-hour average	EPA Method 16 or 16A is the reference method or a test method approved in writing by Ecology. Monitor continuously using an approved CEM that conforms to 40 CFR Part 60 (March 26, 1987), App. B, Perf. Spec. 5, and App. F.[3,5] Report monthly.	40 CFR 60.7(c), (d), (e), (f), and (h) for excess emission notification 60.283(a)(5) of Subpart BB, 40 CFR Part 60 PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 19

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
G.10		2.5 tpy annual average	Average is calculated using an approved CEM that conforms to 40 CFR Part 60 (March 26, 1987), App. B, Perf. Spec. 5, and App. F. Report progress toward annual limit in the monthly report.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 19
G.11	HAPs	Particulate surrogate: 0.064 gr/dscf (0.15 g/dscm) at 10% O_2 hourly average	Monitor pressure drop and flow rate of the scrubber at least once every 15 minutes. The pressure drop will be at least 24 inches of water and the flow rate through the first stage of the scrubber will be at least 380 gallons per minutes.[3,4] Begin corrective action, as specified in the SSM plan, when an exceedence occurs (any 3-hr average out of compliance with pressure drop, scrubber flow, or pH requirements). A violation occurs when 6 or more 3-hr averages are out of compliance with pressure drop, scrubber flow, or pH requirements during a 6-month reporting period. No more than one exceedence can occur per 24 hour period. Report excursions in the quarterly report.	40 CFR 63.862(a)(1)(i) for HAP limit 40 CFR 63.864(e) for monitoring 40 CFR 63.864 (k)(1) for corrective action; 40 CFR 63.864 (k)(2) for violation definition; 40 CFR 63.864 (k)(3) for nunber of exceedences per period. 40 CFR 63.6(f) for SSM exclusion.
G.12			If a source test exceeds the particulate surrogate concentration listed in condition G.11, permittee may use the PM overall compliance method described in 40 CFR 63.862(a)(ii) and 66 FR 3180 (January 12, 2001 or most recent version) to demonstrate compliance with the HAPS standard. The calculation must be made with the source test data from #3 and #4 recovery furnaces, #3 and #4 smelt tank for the same month, if available, or most recent source test data, if data from the same month is not available.	40 CFR 63.862(a)(ii) and 66 FR 3180

Note: Refer to Appendix G for footnotes' definition.

The following **state-only** requirement is not federally enforceable under the federal Clean Air Act:

G.13	TRS	80 ppmvd @ 10% O_2 for two consecutive hours in any one day	DOE Method 12 is the reference method. Monitor continuously using an approved CEM that conforms to 40 CFR Part 60 (March 26, 1987), App. B, Perf. Spec. 5, and App. F. Report excursions in the monthly report.	WAC 173-405-040(3)(b)

Note: Refer to Appendix G for footnotes' definition.

H. No. 5 Power Boiler

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
H.1	PM_{10}	0.0164 gr/dscf (0.0373 g/dscm) @ 8% O_2, hourly average (average	Sample monthly consisting of three one-hour tests using EPA Method 5 or a test method approved in writing by Ecology. Report test results to Ecology in the monthly	WAC 173-405-040 for the O&M requirement 40 CFR Part 64 for CAM requirements

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
		of 3 one-hour runs)	report.[2] The permittee shall comply with Condition H.11, intended to indicate compliance with the particulate limit and CAM requirements.	(see Section Q) Order DE-1147
H.2	PM_{10}	36.7 tpy, annual total of PM_{10}	Annual total value is calculated using actual emissions from the most recent stack test results. Permittee shall submit a monthly report of progress toward the annual limit.	Order DE-1147
H.3	Opacity	Average 20% opacity for more than 6 consecutive minutes in any 60-minute period	EPA Method 9 or a test method approved by Ecology is the reference test method. The permittee shall comply with Condition H.11 for opacity monitoring and reporting requirements.	WAC 173-405(6) Order DE-1147
H.4	SO_2	16.6 ppm on volume on a dry basis @ 7% O_2, on a 24-hour average	EPA Method 6 or 6C is the reference method. Monitor continuously using an approved CEM that conforms to 40 CFR Part 60 (March 26, 1987), App. B, Perf. Spec. 2, and App. F.[3,6] Report excursions in the monthly report.	Order DE-1147
H.5		48.6 tpy, annual total	EPA Method 6 or 6C or a test method approved by Ecology is the reference method. Annual total value is calculated using an approved CEM that conforms to 40 CFR Part 60 (March 26, 1987), App. B, Perf. Spec. 2, and App. F. Permittee shall submit a monthly report of progress toward the annual limit.	Order DE-1147
H.6	NO_X	99.2 lb/hr (44.99 kg/hr) on a 24-hour average. 434.5 tons on an annual total	EPA Method 7, 7B, or 7E or a test method approved in writing by Ecology is the reference method. Monitor continuously using an approved CEM that conforms to 40 CFR Part 60 (December 13, 1990), App. B and F, Perf. Spec. 2. Report test results monthly. Permittee shall submit a monthly report of progress toward the annual limit.	Order DE-1147 WAC 173-401-620(2)(j) WAC 173-405-040(10) for the O&M requirements 40 CFR Part 60, App. B & F, Perf. Spec. 2
H.7	CO	0.19 lb/MMBtu heat input, 30-day rolling average	EPA Method 10 or a test method approved in writing by Ecology is the reference method. Annual total value is calculated using actual emissions from the most recent stack test results. Report monthly.	Order DE-1147 WAC 173-400-110
H.8		264.6 tpy, annual total	Annual total value is calculated using actual emissions from the most recent stack test results. Permittee shall submit a monthly report of progress toward the annual limit.	Order DE-1147 WAC 173-400-110
H.9	VOC	8.8 tpy, annual total	EPA Method 25A or 25B or a test method approved in writing by Ecology is the reference method. Annual total value is calculated using actual emissions from the most recent stack test results. Permittee shall submit a monthly report of progress toward the annual limit.	Order DE-1147
H.10	TRS	7.3 tpy, annual total	EPA Method 16, 16A, or 16B or a test method approved in writing by Ecology is the	Order DE-1147

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
			reference method. Monitor *monthly* using an approved CEM that conforms to 40 CFR Part 60 (March 26, 1987), App. B, Perf. Spec. 2, and App. F.[3,6] Report excursions in the monthly report. Annual total value is calculated using actual emissions from the most recent stack test results. Permittee shall submit a monthly progress report toward annual limit.	
H.11	Operation	Minimum operating condition	Permittee shall continuously monitor the following operating parameters as performance indicators as follows:[3,6] Venturi scrubber: • Minimum pressure drops 22.0 in of water • Minimum flow rates of 520 gpm Packed-bed scrubber: • Minimum flow rate of 1800gpm Records of the hourly average of pressure drops and flow rates will be maintained. Whenever an hourly average is below the specified range, the permittee will initiate corrective action within 24 hours. Failure to initiate corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report 1-hour average excursions and corrective action in the monthly report.	WAC 173-405-040 for the O&M requirement WAC 173-401-620(2)(j) 40 CFR Part 64.2 (see Section Q) Order DE-1147
H.12	Fuel Types and Steam Loading Limits	Fuel types and steam production shall be as follows: • Natural gas only; steam rate greater than 65,000 pounds per hour, on daily average. • Natural gas as based fuel co-fired with No. 6 fuel oil; steam rate greater than 117,000 pounds per hour, on daily average.	The Permittee must conduct an initial performance test to demonstrate compliance with the permit limits prescribed herein using applicable EPA Reference Methods. The tests must contain at least three 1-hour runs at the lowest permitted steam rate on a daily average. The test requirement is one time only. Report results 60 days after test completion. Track fuel types and steam generation. Report limits in monthly report.	Order DE-1147

Note: Refer to Appendix G for footnotes' definition.

I. No. 3 Power Boiler

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.1	PM_{10}	0.01 gr/dscf (0.0273 g/dscm) @ 7% O_2 on an hourly average (average of 3 one-hour runs)	Sample monthly using EPA Method 5. Report test results in the monthly report.[2] The permittee shall comply with Condition I.9, intended to indicate compliance with the particulate limit and CAM requirements.	60.43b(c)(1) of Subpart Db; 40 CFR Part 60 60.43b(g) of Subpart Db, 40 CFR Part 60 WAC 173-405-040(10) for the O&M requirement PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 26 40 CFR 64.2 CAM requirements (see Section Q)
I.2		36 tpy annual average	Annual average value is calculated using actual emissions from *the most recent* stack test results. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 26
I.3	Opacity	Average 20% for more than 6 consecutive minutes in any 60-minute period	EPA Method 9 is the reference test method. Monitor continuously using an approved CEM that conforms to 40 CFR Part 60 (December 13, 1990), App. B, Perf. Spec. 1, and App. F.[3,5] Report only excursions in the monthly report.	40 CFR 60.7(c), (d), (e), (f), and (h) for excess emission notification 40 CFR § 60.11(b) 40 CFR § 60.43b(f) 40 CFR § 60.43b(g) PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 27
I.4	SO_2	99 tpy annual average	Permittee shall conduct a SO_2 source test, consisting of three one-hour runs once each permit term using EPA Method 6 is the reference method or a test method approved in writing by Ecology. During each test run the permittee shall record the boiler's operating conditions such as solid fuel and/or natural gas fired, excess oxygen level, and steam production rate. Report test results and operating conditions within 60 days from the last sampling. Annual average value is calculated using actual emissions from *the most recent* stack test results. Report results no later 60 days after source test completion.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 28
I.5	NO_X	0.25 lb/MMBtu heat input, 30-day rolling average	EPA Method 7, 7B, or 7E is the reference method. Monitor continuously using an approved CEM that conforms to 40 CFR Part 60 (December 13, 1990), App. B, Perf. Spec. 2, and App. F.[3,5] Report only excursions in the monthly report.	40 CFR 60.7(c), (d), (e), (f), and (h) for excess emission notification 40 CFR 60.13 for monitoring requirement 40 CFR § 60.44b PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 29
		433 tpy, annual average	Annual average value is calculated using an approved CEM that conforms to 40 CFR Part 60 (December 13, 1990), App. B and F, Perf. Spec. 2. Permittee shall submit a monthly	40 CFR § 60.13 for monitoring requirement PSD-88-3 Modification 2 DE-88-360 Modification 2

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
			report of progress toward the annual limit.	Condition 29
I.6	CO	1040 tpy, annual average	EPA Method 10 is the reference method or a test method approved in writing by Ecology. Annual average value is calculated using actual emissions from *the most recent* stack test results. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 30
I.7	VOC	121 tpy, annual average	EPA Method 25A is the reference method or a test method approved in writing by Ecology. Annual average value is calculated using actual emissions from *the most recent* stack test results. Permittee shall submit a monthly report of progress toward the annual limit.	PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 31
I.8	ESP inlet temperature	500°F (260(C) hourly average	The permittee shall continuously monitor the temperature of the gases entering the No. 3 Power Boiler ESP.[3,6] If the parameter is greater than the specified operating limit, the Permittee will initiate corrective action within 24 hours. Failure to initiate corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report corrective actions and opacity excursions in the monthly report.	WAC 173-405-040(10) for the O&M requirement PSD-88-3 Modification 2 DE-88-360 Modification 2 Condition 32
I.9	Operation	Minimum operating condition	Monitor continuously using an approved CEM that conforms to 40 CFR Part 60 (December 13, 1990), App. B and App. F, Perf. Spec. 1.[3,5] The boiler emissions shall be no greater than 20 percent opacity for the averaging period as outlined in Condition I.3 to show continuous operation of the pollution control device. If the minimum operational parameter is greater than the specified operating range in 40 CFR Part 60 (December 13, 1990), App. B and App. F, Perf. Spec. 1, the permittee will initiate corrective action within 24 hours. Failure to initiate corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report corrective actions and opacity excursions in the monthly report.	WAC 173-405-040 (10) WAC 173-401-615(1)(b) WAC 173-401-630(1)

Note: Refer to Appendix G for footnotes' definition.

J. No. 4 Power Boiler

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
J.1	Particulate	0.1 gr/dscf (0.227g/dscm) @ 7% O_2, hourly average	EPA Method 5 is the reference method or a test method approved in writing by Ecology. The permittee shall comply with Condition J.4, intended to indicate compliance with the	WAC 173-400-050(5)(1) WAC 173-405-040(10) for the O&M requirements

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
			particulate limit.	
J.2	Opacity	Average 20% for more than 6 consecutive minutes in any 60 minutes period	EPA Method 9 is the reference method of a test method approved in writing by Ecology. Monitor continuously using an approved CEM that conforms to 40 CFR Part 60 (September 15, 1994), App. B, Perf. Spec. 1, and 40 CFR 60.13(d). Report only excursions in the monthly report.	WAC 173-400-105(5)(e) WAC 173-405-040(6)
J.3	SO_2	1000 ppm, hourly average	By intrinsic design, the unit cannot exceed the limit when firing natural gas. Compliance is demonstrated through normal operation when exclusively firing natural gas. When firing with fuel oil, sulfur content by weight in fuel will not exceed 2% by weight. Maintain fuel receipts showing that all fuel oil fired is less than or equal to 2% sulfur.	WAC 173-405-040(11)(b)
J.4	Fuel: Annual Heat Input Limit	Annual fuel heat input limits not to be exceeded on calendar year basis: Total Heat Input 527,486 MMBtu No. 6 Fuel Oil Heat Input 131,871 MMBtu	Track fuel usage in MMBTU and report year-to-date usage in each monthly report.	Order DE-1147 WAC 173-400-091

Note: Refer to Appendix G for footnotes' definition.

The following **state-only** requirement is not federally enforceable under the federal Clean Air Act:

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
J.5	Operation	Minimum operating condition	Monitor continuously using an approved CEM that conforms to 40 CFR Part 60 (September 15, 1994), App. B, Perf. Spec. 1, and 40 CFR 60.13(d). The boiler emissions shall be no greater than 20 percent opacity for the averaging period as outlined in Condition J.2. If the minimum operational parameter is greater than the specified operating range 40 CFR Part 60 (September 15, 1994), App. B, Perf. Spec. 1, and 40 CFR 60.13(d), the permittee will initiate corrective action within 24 hours. Failure to initiate corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report corrective actions and opacity excursions in the monthly report.	WAC 173-405-040(10) WAC 173-401-615(1)(b) WAC 173-401-630(1)

Note: Refer to Appendix G for footnotes' definition.

K. Bleaching System (NESHAP Subpart S)

Applies to vents of the following equipment and/or processes:
Bleach plant towers, washer hood and filtrate chests
Bleach plant chlorine dioxide towers, seal tanks, washer hoods including E_{Op} washer hood, and from R8 tail gas scrubber

(Note: Only the 40 CFR Part 63 requirements are cited in this permit as the applicable requirements. WAC 173-400-075(5) incorporates MACT by reference.)

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
K.1.a	Total chlorinated HAP (not including chloroform)	No visible defects in enclosure openings and closed vent system components	Perform monthly visual inspection of each enclosure opening and closed-vent system component as specified in 40 CFR 63.453(k). If an inspection identifies visible defects or if enclosure openings are not maintained at negative pressure or a detectable leak as indicated by an instrument reading of equal or greater than 500 ppm by volume above background, then the following corrective actions shall be taken: Make a first effort to repair or correct the closed vent system as soon as practicable, but no later than five calendar days after the problem has been identified: Complete the repair or corrective action no later than 15 days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if it is determined that the emissions resulting from the immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process shutdown.	40 CFR 63.453(k)(1), (2), and (3) for monthly visual inspection. 40 CFR 63.453(k)(6) for compliance requirements
K.1.b	Total chlorinated HAP (not including chloroform)	Enclose, collect, and treat all gases vented from each bleaching stage where chlorinated compounds are introduced.	Record all periods during which bleach plant vent gases were not collected and treated each month. Report periods of such non-treatment monthly.	40 CFR 63.445(b) for chlorinated HAP management requirements
K.2.a	K4/R8 Bleach Plant Total chlorinated HAP (not including chloroform)	Treat bleach plant vent gases to achieve a scrubber outlet concentration of 10 parts per million or less by volume as	Operation of the scrubber outside the range established for operating parameter values shall constitute a violation of the applicable emission standard and shall be reported as excess emissions in the monthly report. The permittee shall comply with Condition K.2.b, K.2.c and K.2.d, intended to indicate compliance with the total chlorinated HAP	40 CFR 63.445(c) for HAP limit

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
		measured as Chlorine.	limit.	
K.2.b		K4/R8 white liquor scrubber: Fan amperage greater than 14.5 amps, hourly average	Monitor scrubber fan motor function continuously as a performance indicator.[3,4] If fan amperage is outside of the established range based on an hourly average, permittee will initiate corrective action within 24 hours. Report only excursions in the monthly report.	40 CFR 63.453(c) for monitoring requirements 40 CFR 63.453(m) for alternate operating parameter
K.2.c		K4/R8 white liquor scrubber: Pressure drop, Δp, inches of water: $8 < \Delta p < 16$, hourly average	Monitor scrubber pressure drop continuously as a performance indicator.[3,4] If the scrubber pressure drop is outside of the established range based on an hourly average, permittee will initiate corrective action within 24 hours. Report only excursions in the monthly report.	40 CFR 63.453(c) for monitoring requirements 40 CFR 63.453(m) for alternate operating parameter
K.2.d		K4/R8 white liquor scrubber: Flow at least 150 gpm and pH ≥ 10.0, hourly average	Monitor scrubber flow rate and pH continuously as a performance indicator.[3,4] If the scrubber pressure drop is outside of the established range based on an hourly average, permittee will initiate corrective action within 24 hours. Report only excursions in the monthly report.	40 CFR 63.453(c) for monitoring requirements 40 CFR 63.453(m) for alternate operating parameter
K.3.a	K5 Bleach Plant Total chlorinated HAP (not including chloroform)	Treat bleach plant vent gases to achieve a scrubber outlet mass emission rate of 0.002 pound total chlorinated HAP measure as chlorine per ton (0.001 kg per megagram) of ODP.	Operation of the scrubber outside the range established for operating parameter values shall constitute a violation of the applicable emission standard and shall be reported as excess emissions in the monthly report. The permittee shall comply with Condition K.3.b, K.3.c, K.3.d, and K.3.e, intended to indicate compliance with the total chlorinated HAP limit.	40 CFR 63.445(c) for HAP limit
K.3.b		K5 white liquor scrubber: Fan amperage range 8 <AMP< 18, hourly average	Monitor scrubber fan motor function continuously as a performance indicator.[3,4] If fan amperage is outside of the established range based on an hourly average, permittee will initiate corrective action within 24 hours. Report only excursions in the monthly report.	40 CFR 63.453(c) for monitoring requirements 40 CFR 63.453(m) for alternate operating parameter
K.3.c		K5 white liquor scrubber: Pressure drop, Δp, inches of water: $6 < \Delta p < 16$, hourly average	Monitor scrubber pressure drop continuously as a performance indicator.[3,4] If the scrubber pressure drop is outside of the established range based on an hourly average, permittee will initiate corrective action within 24 hours. Report only excursions in the monthly report.	40 CFR 63.453(c) for monitoring requirements 40 CFR 63.453(m) for alternate operating parameter
K.3.d		K5 white liquor scrubber: Flow at least 110 gpm and pH ≥ 10.0, hourly average	Monitor scrubber flow rate and pH continuously as a performance indicator.[3,4] If the scrubber pressure drop is outside of the established range based on an hourly average, permittee will initiate corrective	40 CFR 63.453(c) for monitoring requirements 40 CFR 63.453(m) for alternate operating

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
			action within 24 hours. Report only excursions in the monthly report.	parameter
K.3.e		Chlorine dioxide (ClO_2) addition rate no greater than 28.4 lb/UBODTP, hourly average	Monitor chlorine dioxide addition rate to the D2 tower continuously as a performance indicator.[3,4] If the addition rate is outside of the established range based on an hourly average, permittee will initiate corrective action within 24 hours. Report only excursions in the monthly report.	40 CFR 63.453(c) for monitoring requirements 40 CFR 63.453(m) for alternate operating parameter
K.4	Total chlorinated HAPs (as chlorine)	Collect all gases vented from each bleaching stage where chlorinated compounds are introduced	Conduct annual performance test on positive pressure closed-vent system using procedures specified in 40 CFR 63.457(d). Report test results within 60 days of conducting test. Conduct annual performance test on negative pressure closed-vent system using procedures specified in 40 CFR 63.457(e). Report test results within 60 days of conducting test.	40 CFR 63.445(b) for chlorinated HAP management requirement 40 CFR 63.453(k)(3) & (4) for annual leak test
K.5	Chloroform	The permittee shall use no hypochlorite or chlorine for bleaching in the bleaching systems or line.	Report only deviations and corrective actions in the monthly report.	40 CFR 63.445(d) for chlorinated HAP requirement

[1] Refer to Appendix G for footnotes' definition.

L. Will II Sheeter

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
L.1	Particulate	0.008 gr./dscf, hourly average (average of 3 one-hour runs)	EPA Method 5 as prescribed in 40 CFR Part 60 (July 1, 1998) is the reference method. Sample once per permit term consisting of three 1-hour tests using the reference method or a test method approved in writing by Ecology. The Permittee shall comply with Condition L.4, intended to indicate compliance with the particulate limit.	Order DE 93AQ-I140 WAC 173-405-040(10) for the O&M requirements
L.2		5 tpy, annual average	Annual average value is calculated using actual emissions from previous stack test results. Permittee shall submit a monthly report of progress toward the annual limit.	Order DE 93AQ-I140
L.3	Opacity	Average 5% for more than 6 consecutive minutes in any 60 minute period	EPA Method 9 as prescribed in 40 CFR Part 60 (July 1, 1998) is the reference method or a test method approved in writing by Ecology. The permittee shall comply with Condition L.4, intended to indicate compliance with the opacity limit.	WAC 173-400-040(1) Order DE 93AQ-I140

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
L.4	Operation	Minimum operating condition	Monitor the baghouse pressure drop continuously as a performance indicator.[3,6] Maintain the pressure drop within the range limit of 0.2 to 6.0 inches of water. Whenever the pressure drop is beyond the specified limits, the permittee will initiate corrective action within 24 hours. Failure to initiate corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report excursions and corrective action in the monthly report.	WAC 173-405-040(10) WAC 173-401-615(1)(b) WAC 173-401-630(1)

[1] Refer to Appendix G for footnotes' definition.

M. Screen Fines Cyclone

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
M.1	Particulate	0.007 gr/dscf	EPA Method 5 as prescribed in 40 CFR Part 60 (July 1, 1998) is the reference method. The permittee shall comply with Condition M.4, intended to indicate compliance with the particulate limit	Order DE 87-309 WAC 173-405-040(10) for the O&M requirements
M.2	Particulate	2.6 tpy, annual average	Annual average value is calculated using actual emissions from the most recent stack test results. The permitted shall comply with Condition M.4, intended to indicate compliance with the particulate limit.	Order DE 87-309
M.3	Opacity	Average 10% for more than 6 consecutive minutes in any 60 minute period	EPA Method 9 as prescribed in 40 CFR Part 60 (July 1, 1998) is the reference method or a test method approved in writing by Ecology. The permittee shall comply with Condition M.4, intended to indicate compliance with the opacity limit.	WAC 173-400-040(1) Order DE 87-309
M.4	Operation	Minimum operating condition	The permittee shall provide monthly inspection of the cyclone. Whenever a cyclone malfunctions, the permittee will initiate corrective action within 24 hours. Failure to initiate corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report excursions and corrective action in the monthly report.	WAC 173-405-040(10) WAC 173-401-615(1)(b) WAC 173-401-630(1)

[1] Refer to Appendix G for footnotes' definition.

N. Chip Packing Cyclone

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
N.1	Particulate	0.007 gr/dscf	EPA Method 5 as prescribed in 40 CFR Part 60 (July 1, 1998) is the reference method. The permittee shall comply with Condition N.4, intended to indicate compliance with the particulate limit.	Order DE 87-309 WAC 173-405-040(10) for the O&M requirements
N.2		1.4 tpy	Annual average value is calculated using actual emissions from the most recent stack test results. The permittee shall comply with Condition N.4, intended to indicate compliance with the particulate limit.	Order DE 87-309
N.3	Opacity	0%[8]	EPA Method 9 as prescribed in 40 CFR Part 60 (July 1, 1998) is the reference method or a test method approved in writing by Ecology. The permittee shall comply with Condition N.4 for opacity monitoring and reporting requirements.	WAC 173-400-040(1) Order DE 87-309
N.4	Operation	Minimum operating condition	The permittee shall provide for monthly inspection of the cyclone. When the cyclone malfunctions, the permittee will initiate corrective action within 24 hours. Failure to initiate corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report excursions and corrective action in the monthly report.	WAC 173-405-040(10) WAC 173-401-615(1)(b) WAC 173-401-630(1)

[1] Refer to Appendix G for footnotes' definition.

O. East Truck Unloader Conveyor

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
O.1	Operation	Minimum operating condition	The permittee shall provide water sprays, chutes, deflector, or sock at conveyor discharge points. The permittee will provide monthly inspection of the emission control equipment. Whenever the water sprays, chutes, and socks malfunction, the permittee will initiate corrective action within 24 hours. Failure to initiate corrective action within 24 hours is a violation of WAC 173-410-040(4) and may be a violation of the underlying applicable requirement. Report excursions and corrective action in the monthly report.	Order DE-87-309 WAC 173-400-040(8) WAC 173-410-040(4) WAC 173-401-615(1)(b) WAC 173-401-630(1)

[1] Refer to Appendix G for footnotes' definition.

P. Fines Blow Line

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
P.1	Operation	Minimum operating condition	The permittee shall provide water sprays and deflectors that will be operated continuously during chip discharge at the fines blow line.[3,6] The water pressure will be maintained at a minimum of 30 psig. The inspection of the water sprays will be conducted on a daily basis and an inspection log will be maintained. Whenever the water sprays and deflectors malfunction, the permittee will initiate corrective action within 24 hours. Failure to initiate corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report excursions and corrective action in the monthly report.	Order 95-AQI-050 WAC 174-400-040(8) WAC 173-405-040(10) WAC 173-401-615(1)(b) WAC 173-401-630(1)

Note: Refer to Appendix G for footnotes' definition.

Q. Compliance Assurance Monitoring

CAM monitoring requirements are applicable for particulates at No. 3 and No. 5 Power Boilers. This permit requires Condition I.9 and H.11 to satisfy particulate CAM requirements for the boilers. For No. 5 Power Boiler, CAM requirements for NOx as specified herein utilize a Parametric Emission Modeling System (PEMS). The following tables indicates the selected monitoring approach, quality control/quality assurance (QA/QC), and indicator parameter.

	Indicator No. 1	Indicator No. 2
I. Indicator	Steam Flow Rate	Boiler Excess Oxygen
Measurement Approach	The hourly steam flow rate is monitored as an input to the PEMS model.	The hourly boiler excess oxygen is monitored as an input to the PEMS model.
II. Indicator Range	An excursion is defined as a 24-hour daily average emission greater than 99.2 lbs/hour. Excursions trigger an incident investigation, corrective action, and a reporting requirement.	An excursion is defined as a 24-hour daily average emission greater than 99.2 lbs/hour. Excursions trigger an incident investigation, corrective action, and a reporting requirement.
III. Performance Criteria		
A. Data Representativeness	Steam flow is measured with a nozzle flow meter with a minimum accuracy of less than or equal to 1% of the flow rate.	The boiler excess oxygen monitor has a minimum accuracy of less than 2% calibration error to zero and upscale reference gases.
B. Verification of Operational Status	Monitor connected to process computer system.	Monitor connected to process computer system.
C. QA/QC Practices and Criteria[3]	Annual calibration of flow meters: acceptance criteria is less than or equal to 1%. Annual relative accuracy test of the PEMS: acceptance criteria is less than or equal to 20%.	Monthly zero and upscale calibration of oxygen monitor.
D. Monitoring Frequency	Steam rate is monitored continuously. The NO_x emission rate is calculated hourly and daily using the PEMS model.	The boiler excess oxygen is monitored continuously. The NO_x emission rate is calculated hourly and daily using the PEMS model.
E. Data Collection Procedures	The process computer system records the hourly steam rate and the hourly and daily emission rates calculated using the PEMS model.	The process computer system records the hourly boiler excess oxygen rate and the hourly and daily emission rates calculated using the PEMS model.
F. Averaging Period	Steam Rate: Hourly NO_x Emission Rate: Hourly and Daily Average	Boiler Excess Oxygen: Percent NO_x Emission Rate: Hourly and Daily Average

[3] Refer to Appendix G for definition

	Indicator No. 3	Indicator No. 4
I. Indicator	Flue Gas Recirculation Rate	Fuel Oil Firing Rate
Measurement Approach	The hourly flue gas recirculation rate is monitored as an input to the PEMS model.	The hourly fuel oil firing rate is monitored as an input to the PEMS model.
II. Indicator Range	An excursion is defined as a 24-hour daily average emission greater than 99.2 lbs/hour. Excursions trigger an incident investigation, corrective action, and a reporting requirement.	An excursion is defined as a 24-hour daily average emission greater than 99.2 lbs/hour. Excursions trigger an incident investigation, corrective action, and a reporting requirement.
III. Performance Criteria		
A. Data Representativeness	Flue gas recirculation rate is measured with a venturi flow meter with a minimum accuracy of less than or equal to 1% of the flow rate.	Fuel oil firing rate is measured with a mass flow meter with a minimum accuracy of less than or equal to 1% of the flow rate.
B. Verification of Operational Status	Monitor connected to process computer system.	Monitor connected to process computer system.
C. QA/QC Practices and Criteria[3]	Annual calibration of flow meters: acceptance criteria is less than or equal to 1%. Annual relative accuracy test of the PEMS: acceptance criteria is less than or equal to 20%.	Annual calibration of flow meters: acceptance criteria is less than or equal to 1%. Annual relative accuracy test of the PEMS: acceptance criteria is less than or equal to 20%.
D. Monitoring Frequency	Flue gas recirculation rate is monitored continuously. The NO_x emission rate is calculated hourly and daily using the PEMS model.	Fuel oil firing rate is monitored continuously. The NO_x emission rate is calculated hourly and daily using the PEMS model.
E. Data Collection Procedures	The process computer system records the hourly flue gas recirculation rate and the hourly and daily emission rates calculated using the PEMS model.	The process computer system records the hourly fuel oil firing rate and the hourly and daily emission rates calculated using the PEMS model.
F. Averaging Period	Flue Gas Recirculation Rate: Hourly NO_x Emission Rate: Hourly and Daily Average	Fuel Oil Firing Rate: Hourly NO_x Emission Rate: Hourly and Daily Average

[3] Refer to Appendix G for definition

	Indicator No. 5	Indicator No. 6
I. Indicator	Stripper Off-Gas (SOG) Flow Rate	Non-Condensible (NCG) Flow Rate
Measurement Approach	The hourly SOG flow rate is monitored as an input to the PEMS model.	The hourly NCG flow rate is monitored as an input to the PEMS model.

II. Indicator Range	An excursion is defined as a 24-hour daily average emission greater than 99.2 lbs/hour. Excursions trigger an incident investigation, corrective action, and a reporting requirement.	An excursion is defined as a 24-hour daily average emission greater than 99.2 lbs/hour. Excursions trigger an incident investigation, corrective action, and a reporting requirement.
III. Performance Criteria		
A. Data Representativeness	SOG Flow Rate is measured with a orifice flow meter with a minimum accuracy of less than or equal to 1% of the flow rate.	NCG Flow Rate is measured with a venture flow meter with a minimum accuracy of less than or equal to 1% of the flow rate.
B. Verification of Operational Status	Monitor connected to process computer system.	Monitor connected to process computer system.
C. QA/QC Practices and Criteria[3]	Annual calibration of flow meters: acceptance criteria is less than or equal to 1%. Annual relative accuracy test of the PEMS: acceptance criteria is less than or equal to 20%.	Annual calibration of flow meters: acceptance criteria is less than or equal to 1%. Annual relative accuracy test of the PEMS: acceptance criteria is less than or equal to 20%.
D. Monitoring Frequency	SOG Flow Rate is monitored continuously. The NO_x emission rate is calculated hourly and daily using the PEMS model.	NCG Flow Rate is monitored continuously. The NO_x emission rate is calculated hourly and daily using the PEMS model.
E. Data Collection Procedures	The process computer system records the SOG flow rate and the hourly and daily emission rates calculated using the PEMS model.	The process computer system records the NCG flow rate and the hourly and daily emission rates calculated using the PEMS model.
F. Averaging Period	SOG Flow Rate: Hourly NO_x Emission Rate: Hourly and Daily Average	NCG Flow Rate: Hourly NO_x Emission Rate: Hourly and Daily Average

[3] Refer to Appendix G for definition

R. NESHAP SSM Plan, Recordkeeping, and reporting

The Georgia Pacific Camas Mill contains affected sources subject to the NESHAP for the Pulp and Paper Industry (Subpart S) and the NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (Subpart MM). The SSM Plan, recordkeeping and reporting requirements in R.1 through R.10 apply to the affected sources listed in sections A, B, D, E, G, Section K (Bleaching System), Section S (LVHC), Section T (HVLC), and Section U (Pulping Process Condensates) of this permit. The requirement in R.11 applies to the affected sources listed in sections K, S, T, and U. The requirements in R.12 apply to the affected sources listed in sections A, B, D, E, and G.

(Note: Only 40 CFR Part 63 requiements are cited in this permit as the applicable requirements. WAC 173-400-075(5) incorporated MACT by reference.)

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
R.1	HAPs	SSM Plan	Develop and implement a written startup, shutdown, and malfunction (SSM) plan for operating and maintaining affected sources subject to NESHAP Subparts S & MM during SSM periods, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with 40 CFR 63 Subparts S & MM standards. The SSM plan shall include the elements set forth in 40 CFR 63.6(e)(3).	40 CFR 63.6(e)(3)(i)
R.2	HAPs		During SSM periods, operate and maintain mill systems (including associated air pollution control equipment) in accordance with the SSM plan. Malfunctions shall be corrected as soon as possible after their occurrence in accordance with the SSM plan.	40 CFR 63.6(e)(3)(i)
R.3			Change the SSM plan, if required by Ecology, if it is determined to be unacceptable under 40 CFR 63.6(e)(2).	40 CFR 63.6(e)(3)(vii)
R.4			Update the SSM plan within 45 days of an SSM event that the plan failed to address or inadequately addressed.	40 CFR 63.6(e)(3)(viii)
R.5		Recordkeeping (General Requirements)	NESHAP Subparts S & MM Record Retention - maintain files of all information (including all reports and notifications) required by 40 CFR Part 63, Subparts S & MM in a form suitable and readily available for inspection for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report or record. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks or on microfiche.	40 CFR 63.10(b)(1) and 40 CFR 63.6(e)(3)(v)
R.6			Keep the SSM Plan on record to be made available for inspection, upon request, by the Ecology or EPA, for the life of mill, or until the mill is no longer subject to the provisions of 40 CFR Part 63. If the SSM Plan is revised, keep previous (i.e. superseded) versions of the Plan on record, to be made available for inspection, upon request, by the Ecology or EPA, for five years following each revision of the Plan.	40 CFR 63.10(b)(1) and 40 CFR 63.6(e)(3)(v)
R.7		Reporting (General Requirements)	Immediate SSM Plan Deviation Report. Any time an action taken during a SSM event (including actions taken to correct a malfunction) is not consistent with the procedures in the permittee's 40 CFR 63 Subparts S & MM SSM Plan, make an immediate report of the actions taken for that event to Ecology within 2 working days, by telephone or facsimile transmission. The immediate report shall be followed by a letter explaining the circumstances of the event, the reasons for not following the plan, and whether any 40 CFR 63 Subpart S or MM excess emissions and/or parameter monitoring exceedences are believed to have occurred. For purposes of this report, a "malfunction" means any sudden, infrequent, and not	40 CFR 63.10(d)(5)(ii) and WAC 173-401-615(3)

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner (failures caused in part by poor maintenance or careless operation are not malfunctions).	
R.8	HAPs		Semi-annual NESHAP Subparts S & MM Summary Report. The monthly CEM reports filed (by July 30th and January 30th) for the months of June and December shall include a semi-annual NESHAP Subparts S & MM summary report for the six month reporting periods ending June 30 and December 31.	40 CFR 63.10(e)(3) and WAC 173-401-615(3)
R.9			Semi-annual SSM Report. If actions taken during SSM events were consistent with the procedures in the permittee's SSM plan the semi-annual report required under Section J of this AOP shall include a statement to that effect.	40 CFR 63.10(d)(5)(i) and WAC 173-401-615(3)
R.10			Comply with NESHAP General Reporting.	40 CFR 63.10(b) and (c)
R.11		Additional Reporting Requirements for Subpart S Affected Sources	Every two years beginning April 15, 1999, submit a non-binding control strategy report in accordance with applicable requirements.	40 CFR 63.455(b) 40 CFR 63.455(b)(1) through (b)(3);
R.12		Additional SSM Plan Requirements for Subpart MM Affected Sources	In addition to the requirements specified in § 63.6(e)(3), the SSM plan for Subpart MM sources must include: procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance; a maintenance schedule for each control technique and recommendations for routine and longterm maintenance; and an inspection schedule for each continuous monitoring system required under § 63.864 to ensure, at least once in each 24-hour period, that each continuous monitoring system is properly functioning.	40 CFR 63.866(a)

S. Low Volume High Concentration (LVHC) System (NESHAP Subpart S)

Applies to:
Kraft Batch Digesters,
Kraft Sawdust Digesters,
Kraft Continuous Digesters,
Multi-Effect & Blow Heat Evaporator Systems,
Concentrator Systems, and
Foul condensate Steam Stripping System Collection Tank.
No. 3 Recovery Furnace Black Liquor Fuel Tank

[40 CFR Part 63, § 63.443(a)(1)(i) & 40 CFR Part 63, § 63.440(d)]

(Note: Only 40 CFR Part 63 requirements are cited in this permit as the applicable requirements. WAC 173-400-075(5) incorporated MACT by reference.)

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
S.1	HAPs	Collection and Treatment	LVHC non-condensible gas source group emissions shall be enclosed and vented into a closed-vent system and routed to the No. 5 Power Boiler and/or the No. 4 Lime Kiln.	40 CFR 63.443(c) WAC 173-405-040(4)
S.2			Each enclosure shall be maintained negative pressure at each enclosure or hood opening as demonstrated by the procedures in 40 CFR Part 63, § 63.457(e). Each enclosure or hood opening closed during the performance test shall be maintained in the closed position at all times except when necessary to open for sampling, inspection, maintenance, or repairs.	40 CFR 63.450(b)
S.3			Each component of the closed-vent system used to control LVHC non-condensible gas source group emissions that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 ppmv above background, as measured by 40 CFR 60, Appendix A, Method 21.	40 CFR 63.450(c) and 40 CFR 63.457(d)
S.4			Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the limitations in 40 CFR Part 63, § 63.443 shall comply with the following: On each bypass line; install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 15 minutes.[3,4] The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line. For bypass line valves that are not computer controlled, maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.	40 CFR 63.450(d)
S.5			Introduce LVHC gases with the primary fuel or into flame zone of the No. 5 Power Boiler and/or the No. 4 Lime Kiln.	40 CFR 63.443(d)(4)
S.6		Inspection and Monitoring	Install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS) as specified in 40 CFR 63.453 (b) through (m), except as allowed in 40 CFR 63.453 (m). The	40 CFR 63.453(b) through (m)

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			CMS shall include a continuous recorder.	
S.7			For each enclosure opening, a visual inspection of the closure mechanism shall be performed at least once monthly to ensure the opening is maintained in the closed position and sealed.	40 CFR 63.453(k)(1)
S.8	HAPs		Each closed vent system (reasonably accessible ductwork, piping, enclosures, and connections to covers in the collection system for the LVHC non-condensible gas source group) shall be visually inspected for visible evidence of defects monthly or as requested by the Department.	40 CFR 63.453(k)(2)
S.9			Measure annually components of closed-vent systems under positive pressure for detectable leaks as specified in 40 CFR Part 63; § 63.457(d).	40 CFR 63.453(k)(3)
S.10			Demonstrate annually that each enclosure opening is maintained at negative pressure as specified in 40 CFR Part 63, § 63.457(e).	40 CFR 63.453(k)(4)
S.11			If an inspection of the LVHC non-condensible gas collection system identifies visible defects, or if an instrument reading of 500 ppmv or greater above background is measured by 40 CFR 60, Appendix A, Method 21 in accordance with the procedures in 40 CFR Part 63, § 63.457(d), or if enclosure openings are not maintained at negative pressure, take the following corrective action as soon as practicable. Make a first effort to repair or correct the closed-vent system as soon as practicable but no later than 5 calendar days after the problem is identified. Complete the repair or corrective action no later than 15 days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the permittee determines that the emissions resulting from immediate repair would be greater than the emission likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process shutdown.	40 CFR 63.453(k)(6) and 40 CFR 63.457(d)
S.12		Record-keeping (specific to LVHC)	For each applicable enclosure opening, closed vent system, and closed collection system, prepare and maintain a site-specific inspection plan, including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection: date of inspection, equipment type and identification, results of negative pressure tests for enclosures, and results of leak detection tests. In addition, if any defects or leaks are detected	40 CFR 63.454(b)

Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
		record: nature of the defect or leak and the method of detection, date the defect or leak was detected and the date of each attempt to repair the defect or leak, repair methods applied in each attempt to repair the defect or leak, reason for the delay if the defect or leak is not repaired within 15 days, expected date of successful repair of the defect or leak if the repair is not completed within 15 days, date of successful repair of the defect or leak, position and duration of opening of bypass line valves and the condition of any valve seals, and duration of the use of manual or computer-controlled bypass valves.	
HAPs		Records shall be maintained for all periods of excess emissions. Periods of excess emissions from the LVHC non-condensible gas source group are not violations of 63.443(c) and (d) provided that the time of excess emissions, not including periods of startup, shutdown, and malfunction, divided by the total process operating time in a semiannual reporting period does not exceed one percent (1%) from the LVHC system.	40 CFR 63.443(e)(1)
S.13	SSM Plan	Permittee shall comply with the SSM plan requirements identified in Section R of this permit.	40 CFR 63.6(e)(i) and 40 CFR 63.866(a)

Note: Refer to Appendix G for footnotes' definition.

T. High Volume Low Concentration (HVLC) System[9] (NESHAP Subpart S) and TRS (State-ony) Sources

By April 17, 2006 the Permitee shall collect and incinerate the following sources:

HVLC Sources:

K4 Post Oxygen Washers
K4 D_o MC Pump Chute Vent
K4 Caustic Tower (Intermediate Chest)
K4 Post Oxygen Washer Seal Chamber systems
K4 Sewer Seal Chamber
K4 Tank systems (No. 44 and 45)
K5 Oxygen Delignification Blow Chute
K5 DD Washer Filtrate Tank
K5 No. 56 Chest (O_2 Delignification)
K5 No. 57 Chest
K5 Liquor Filter Filtrate Tank
K5 Dilution Box Vent
K5 Diffusion Washer 2nd Stage Filtrate Tank
K5 Diffusion Washer 1st Stage Filtrate Tank
K5 Softwood Receiving Chest
K5 SW 4th Stage Washer

K5 SW 4th Stage Washer Filtrate Tank
K5 SW 3rd Stage Washer
K5 SW 3rd Stage Washer Filtrate Tank
K5 SW 2nd Stage Washer
K5 SW 2nd Stage Washer Filtrate Tank
K5 SW 1st Stage Washer
K5 SW 1st Stage Washer Filtrate Tank
K5 SW Foam Tank
K5 Quatenary Screens (No. 1 and No. 2)
K5 Knot Drainer s (No. 1 & No. 2)
K4 HW 3rd Stage Washer
K4 HW 3rd Stage Washer Filtrate Tank
K4 HW 2nd Stage Washer
K4 HW 2nd Stage Washer Filtrate Tank
K4 HW Knot Drainer
K4 HW Foam Tank
K4 No. 3 Washer Shower Tank
K4 HW Decker
K4 HW Decker Filtrate Chests
K4 Quatenary Screens (No. 1 and No. 2)
K4 Rejects Screw Conveyor

Miscellaneous TRS (state-only) Sources:

70% Fuel Liquor Tank No. 4 East & West
Weak Black Liquor Storage Tank systems
Salt Cake Mix Tank
Inside Black Liquor Tank Systems
KBS Tank

(Note: Only 40 CFR Part 63 requirements are cited in this permit as the applicable requirements. WAC 173-400-075(5) incorporated MACT by reference.)

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
T.1	HAPs	Collection and Treatment	HVLC system shall be enclosed and vented to the No. 3 Recovery Furnace and/or the No. 4 Recovery Furnace designated as control device except for each knotter system that does not exceed 0.1 pounds of HAPs per ODP ton, and each screen system that does not exceed 0.2 pounds HAPs per ODP ton.	40 CFR Part 63, 63. 443(a)(1)(ii)(A) 63. 443(a)(1)(ii)(B) 63.443(c) 63.443(d)(4)
T.2			The HVLC system shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures in 40 CFR Part 63, §63.457(e). Each enclosure or hood opening closed during the performance test as specified in §63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to open for sampling, inspection, maintenance, or repairs.	40 CFR 63.450(a)&(b)
T.3			Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the limitations in 40	40 CFR 63.450(d)

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			CFR Part 63, § 63.443 shall comply with the following: On each bypass line, permittee shall install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 15 minutes.[3,4] The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line. For bypass line valves that are not computer controlled, maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.	
T.4	HAPs		Introduce HVLC gases with the primary fuel and/or into flame zone of the No. 3 Recovery Furnace or the No. 4 Recovery Furnace.	40 CFR 63.443(d)(4)
T.5		Monitoring and Reporting	For each enclosure opening, a visual inspection of the closure mechanism as prescribed in § 63.450(b) shall be performed at least once monthly to ensure the opening is maintained in the closed position and sealed.	40 CFR 63.450(b) 40 CFR 63.453(k)(1)
T.6			Each closed vent system (reasonably accessible ductwork, piping, enclosures, and connections to covers in the collection system for the HVLC non-condensible gas source group) shall be visually inspected for visible evidence of defects monthly or as requested by the Department.	40 CFR 63.453(k)(2)
T.7			Measure annually components of closed-vent systems under positive pressure for detectable leaks as specified in 40 CFR Part 63, § 63.457(d).	40 CFR 63.453(k)(3)
T.8			Demonstrate annually that each enclosure opening is maintained at negative pressure as specified in 40 CFR Part 63, § 63.457(e).	40 CFR 63.453(k)(4)
T.9			If an inspection of the HVLC non-condensible gas collection system identifies visible defects, or if an instrument reading of 500 ppmv or greater above background is measured by 40 CFR 60, Appendix A, Method 21 in accordance with the procedures in 40 CFR Part 63, § 63.457(d), or if enclosure openings are not maintained at negative pressure, take the following corrective action as soon as practicable. Make a first effort to repair or correct the closed-vent system as soon as practicable but no later than 5 calendar days after the problem is identified.	40 CFR 63.453(k)(6) and 40 CFR 63.457(d)

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			Complete the repair or corrective action no later than 15 days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the permittee determines that the emissions resulting from immediate repair would be greater than the emission likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process shutdown.	
T.10	HAPs	Recordkeeping (specific to HVLC)	For each applicable enclosure opening, closed vent system, and closed collection system, prepare and maintain a site-specific inspection plan, including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection: date of inspection, equipment type and identification, results of negative pressure tests for enclosures, and results of leak detection tests. In addition, if any defects or leaks are detected record: nature of the defect or leak and the method of detection, date the defect or leak was detected and the date of each attempt to repair the defect or leak, repair methods applied in each attempt to repair the defect or leak, reason for the delay if the defect or leak is not repaired within 15 days, expected date of successful repair of the defect or leak if the repair is not completed within 15 days, date of successful repair of the defect or leak, position and duration of opening of bypass line valves and the condition of any valve seals, and duration of the use of manual or computer-controlled bypass valves.	40 CFR 63.454(b)
T.11			Records shall be maintained for all periods of excess emissions. Periods of excess emissions from the HVLC non-condensible gas source group are not violations of 63.443(c) and (d) provided that the time of excess emissions, not including periods of startup, shutdown, and malfunction, divided by the total process operating time in a semiannual reporting period does not exceed four percent (4%) from the HVLC system.	40 CFR 63.443(e)(2)
T.12		SSM Plan	Permittee shall comply with the SSM plan requirements identified in Section R of this permit.	40 CFR 63.6(e)(i) and 40 CFR 63.866(a)

U. Pulping Process Condensates and Foul Condensate Steam Stripping System (NESHAP Subpart S) Condensate "Named Streams"

This lists the pulping condensate streams that are collected and are subject to 40 CFR 446(c)(3). The streams listed are "named streams" as defined in the permit. Only "named streams" shall be counted toward the collection requirements.

1. Foul condensate from No. 2 Evaporator,
2. Foul condensate from No. 3 Evaporator,
3. Foul condensate from No. 4 Evaporator,
4. Foul condensate from Blow Heat Evaporator,
5. Foul condensate from Blow Heat Accumulator,
6. Foul condensate from K5 Digester,
7. Foul condensate from HVLC system.

[40 CFR Part 63, §63.440(d) and 40 CFR Part 63, §63.6(i)] (Note: Only the 40 CFR Part 63 requirements are cited in this permit as the applicable requirements. WAC 173-400-075(5) incorporates MACT by reference.)

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
U.1	HAPs	Collection Standards	Collect kraft pulping condensate streams from named sources listed that contains at least 5.5 kilograms per megagram (11.1 pounds per ton) of total HAP per oven-dry ton of unbleached brownstock feeding the bleach plant.	40 CFR 63.446(c)(3)
U.2		Collection -- Compliance Demonstration	The permittee shall show compliance with methanol collection standards using the total of methanol collected from the above "named sources" determined by emission factors. Monitor or calculate daily K5 digester production, non K5 digester production, and equivalent pulp production for each condensate stream. Calculate and sum the daily pounds of methanol collected. Calculate the total methanol collected during the preceeding 30 day period from all of the condensate streams. Calculate the total pulp production during the preceeding 30 day period by summing up the daily production over that period. Calculate the amount of methanol collected per ODTP by dividing the total methanol collected during the preceeding 30 days by the total pulp production during that period.	40 CFR 63.7 40 CFR 63.453(i)
			The parameters necessary for calculating the methanol collected and the constants used in the calculations will be from the most recent Initial Condensate Characterization Study (ICCS).	40 CFR 63.7 and 40 CFR 63.453(i)
U.3		Collection -- Initial Condensate Characteriztion Study (ICCS)	The permittee shall demonstrate compliance with the pulping condensate collection requirement by completing an ICCS using the procedures and calculations specified in this Condition. The	40 CFR 63.7 and 40 CFR 63.453(i).

Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
		terms "named streams" and "other streams" are defined in this Condition. The results of the source test shall be submitted not more 60 days following completion of the source test. The source test is considered complete upon receipt of all sample results. The permittee shall perform the following sampling and monitoring on all or part of the named streams for at least 15 consecutive operating days: During the selected ICCS (sampling) period, the permittee shall collect samples on at least 25 percent of the days in the sampling period (rounded up to the next whole day). Sampling days shall be distributed throughout the sampling period in a random fashion. From each stream to be sampled, on the selected sampling days the permittee shall perform at least one sampling run during each 8-hour shift. Sampling shall be done as follows: During each sampling run, a minimum of 3 equally spaced grab samples shall be taken. Alternatively, sampling may be continuous; For each sampling run, the grab samples shall be analyzed separately or combined to create a run composite sample (not necessary if continuously sampled).	40 CFR 63.10(d)(2)
HAPs	Collection -- Initial Condensate Characteriztion Study (ICCS)	The runs or daily composite sample shall be analyzed for methanol using EPA Method 305, NCASI DI/MeOH 94.02, or other method approved by EPA. The volume collected of each sampled stream shall be determined for every day of the ICCS period by either: using a mass balance or process model. using a flow meter. The above will be checked against the flow meter that records the flow from the stripper condensate tank to the stripper column. The amount of pulp produced shall be monitored every day for the entire ICCS period, as ODTP. The permittee shall perform the following calculations: For each collected stream, determine the daily average concentration of methanol from the daily runs or composite sample. For each collected stream, calculate the arithmetic average and the standard deviation of the daily concentration of methanol over the ICCS period. The average	

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			concentration value is the emission factor (EF) for each stream. For each collected stream, calculate the daily pounds of methanol collected as the emission factor (EF) times the daily volume collected or equivalent pulp produced. For each collected stream, calculate the total methanol collected by summing the daily pounds of methanol collected over the ICCS period. Calculate the total pounds of methanol collected during the ICCS by summing the total methanol collected for each stream over the number of streams collected.	
	HAPs	Collection -- Initial Condensate Characteriztion Study (ICCS)	Calculate the total pulp production during the ICCS by summing up the daily pulp production. Calculate the amount of methanol collected per ODTP by dividing the total methanol collected per ODTP by dividing the total methanol collected during the ICCS by the total pulp production during the ICCS. The ICCS demonstrated compliance with Condition U.1. An initial condensate collection compliance averaging period of 30 days has been selected however the averaging period will be from the recent ICCS. If the permittee wishes to collect and treat "other streams", the procedure described above shall be used to determine the emission factor(s). The initial emission factors and averaging period shall be used retroactively from the end of the ICCS period.	
U.4	HAPs	Collection -- Change in EF and/or Treatment Averaging Period	The permittee may change the condensate collection and treatment averaging period of 30 days, using the following procedure: Submit a permit modification request to revise the condensate collection and treatment averaging period, If the permittee is requesting a condensate collection averaging period that is greater than 30 days, the request shall include sufficient condensate sample results to demonstrate that condensate collection variability is not due to undercollection. The report shall include monitoring information over a period of at least 12 months, and an analysis of the data to support the permittee's requested averaging period. The averaging period shall not exceed 60 days. The new condensate collection averaging period becomes effective upon issuance of a permit modification.	40 CFR 63.446
			In the event that a process change is made that requires submittal of a Notice of Construction notice and that would reasonably be expected to alter the methanol concentration of any collected stream(s), the permittee shall establish a new	

Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
		emission factor for each affected stream and demonstrate compliance with this Condition by doing the following: Not less than 14 working days after completing the process change, the permittee shall submit an Initial Condensate Characterization Study (ICCS) retest proposal. The retest proposal shall: describe the process change; identify the stream(s) to be retested; shall propose the start date for the retest; and may allow for a reasonable period of time for the process change to stabilize before the retest. Approval of the retest proposal is not required; however, the Department may request additional information up to 5 working days before the proposed start date of the retest. The retest shall follow the ICCS procedure on the affected stream or streams. The retest period shall be 30 days (the condensate collection averaging period). Upon completion of the retest, the permittee shall submit a report demonstrating that the permittee is in compliance with Condition U.1 In the event that the new emission factors are statistically different from the previous emission factors as determined, the permittee shall conduct a Condensate Emission Factor Verification Study to determine whether or not the average methanol content of each stream during the EF verification test is statistically different than the data collected during the most recent ICCS. The permittee shall submit the study report no later 60 days after receipt of samples results. The permittee shall: record the new emission factor(s); and use the new emission factor(s) retroactively from the beginning of the retest period to show compliance.	
HAPs	Collection -- Change in EF and/or Treatment Averaging Period	The permittee may voluntarily establish a new emission factor or reestablish an existing emission factor for any condensate stream or streams using the following procedure: perform a retest following the ICCS procedure on the affected stream or streams. The retest period shall be 30 days (the condensate collection averaging period). record the new emission factor(s); and use the new emission factor(s) retroactively from the beginning of the retest period to show compliance. The permittee may adjust any or all emission factors using verification data and the following procedure: data obtained during verification testing may be combined with the data used to determine the current emission factor, provided that all verification data obtained since the most recent ICCS procedure be used (i.e., data may not be selectively omitted); record the new emission factor(s); and	

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			use the new emission factor(s) retroactively from the beginning of the most recent verification test to show compliance.	
U.5	HAPs	Collection -- Standards System Requirements	Transfer collected kraft pulping condensate through a closed collection system. The closed collection system shall meet the requirements in 40 CFR Part 63, Subpart RR, Sections §63.960, § 63.961, and § 63.962, except for the closed vent systems and control devices shall be designed and operated in accordance with 40 CFR Part 63, § 63.443(d) and 63.450.	40 CFR 63.446(d)(1)
			The permittee is permitted to install and operate condensate collection tanks (CCT) to collect kraft pulping condensate.	40 CFR 63.446
			The CCT shall be equipped so that the fixed roof and all openings are operated with no detectable leaks, as indicated by an instrument reading of less than 500 ppmv above background as measured by 40 CFR 60, Appendix A, Method 21 in accordance with the procedures in 40 CFR Part 63, § 63.457(d). Each opening will be maintained in a closed, sealed position at all times that the tank contains condensate, except when necessary to use the openings for sampling, removal, or for equipment inspection, maintenance, or repair.	63.446(d)(2) and 63.457(d)
			The CCT shall be equipped with a water seal device on the overflow line.	63.962(b)(2)(i)(A)
			The CCT shall be vented to a closed vent system meeting the requirements in 40 CFR Part 63, § 63.450. CCT vent gases shall be incinerated in the No. 5 Power Boiler or the No. 4 Lime Kiln.	63.446(d)(2)(i)
			The CCT shall be inspected for detectable leaks initially and annually using the procedures in 40 CFR Part 63, § 63.457(d).	63.453(l)(2)
			Kraft pulping condensate collected in the CCT shall be transferred in a closed collection system to the steam stripping system. Kraft pulping condensate shall be treated to remove at least 5.1 kilograms per oven-dry ton of unbleached brownstock feeding the bleach plant (10.2 pounds per ton) of total HAP with methanol as a surrogate calculated as per 40 CFR 63.457(j)(1) and (2).	40 CFR 63.446(e)(5)
U.6		Collection – Inspection and Monitoring	The condensate collection system shall be visually inspected monthly. Follow the inspection requirements found in 40 CFR Part 63, §63.964(a)(1)(i)(A), §63.964(a)(1)(v), and §63.964(b)(1) and (2) including:	40 CFR 63.453(l)
			The unburied portion of the collection system piping shall be visually inspected to verify that there are no defects.	40 CFR 63.964(a)(l)(iii)
			The inspection shall include verification that appropriate liquid levels in the water seals in the CCT are being maintained and identify any other defects that could reduce water seal control effectiveness.	40 CFR 63.964(a)(l)(i)(A)
U.7			Follow the repair requirements found in 40 CFR Part 63, §63.964(a)(1)(i)(A), §63.964(a)(1)(v), and §63.964(b)(1) and (2) including: The first effort to repair a defect shall be no later than 5 calendar days after detection,	40 CFR 63.964(b)(1) and (2)

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			Repair shall be completed as soon as practicable but no later than 15 calendar days after detection unless the repair of the defect requires emptying or temporary removal from service of the collection system. If repair of the defect requires emptying or temporary removal of the condensate collection system from service, the defect will be repaired the next time the process equipment generating the condensate stops operation. The repair of the defect will be completed before the process resumes operation.	
U.8	HAPs	Treatment Standards	Treat the condensate "Named Streams" collected to remove 5.1 kilograms or more of total HAP per megagram (10.2 pounds per ton) of oven-dried ton of pulp, or achieve a total of 330 parts per million or less by weight at the outlet of the steam stripper.	40 CFR 63.446(e)(5)
U.9		Treatment -- Initial Steam Stripping System HAP Reduction Efficiency Study	The permittee shall demonstrate compliance with the pulping condensate treatment requirement by completing a Steam Stripper HAP Reduction Efficiency Study using the procedures and calculations in this Condition. The results of the source test shall be submitted not more than 60 days following completion of the source test. The source test is considered complete upon receipt of all sample results. The permittee shall perform the following sampling and monitoring on the stripper inlet stream and the stripper outlet stream (stripped condensate). Samples shall be taken on three selected 24-hour periods. During each sampling period, 3 samples of the stripper inlet and 3 samples of the stripped condensate an approximately 8 hour intervals will be taken. Inlet and outlet samples shall be taken within a 30 minute period. For each 24 hour sampling period, the individual samples may be run separately or be combined to create inlet and outlet composite samples. During the sampling periods, hourly average of the foul condensate feed to preheater (gpm), foul condensate preheater inlet temperature (degrees F), foul condensate outlet temperature (degrees F), stripping column temperature (degrees F), and 75-lb steam flow to reboiler shall be recorded. The inlet and outlet samples shall be analyzed for methanol using EPA Method 305, NCASI DI/MeOH 94.02, or other method approved by EPA. The mass (weight) of methanol in the stripper inlet and outlet shall be determined for each 24-hour period, and the stripper efficiency determined as follows:	

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			$\text{Stripper Efficiency},\% = \frac{\text{inlet MeOH mass} - \text{outlet MeOH mass}}{\text{inlet MeOH mass}} \times 100$ The average stripper efficiency shall be calculated from the stripper efficiencies calculated for each 24-hour period. The daily average stripper efficiencies shall be used to determine an equation. The equation may include all the steam stripper efficiency data including the data obtained from the ICCS if appropriate. The parameters necessary for calculating the steam stripper system HAP reduction efficiency equation was presented in the ICCS. The permittee shall follow the procedures in this condition and conduct one Steam Stripper HAP Reduction Efficiency Study per calendar year at approximately 12 month intervals. The equation will be representative Steam Stripping System HAP Reduction Efficiency Study.	
U.10	HAPs	Treatment – Demonstrate Compliance	The permittee shall show compliance with methanol treatment standards using the representative equation developed by the Steam Stripping System HAP Reduction Efficiency Study. Use the amount of methanol collected per ODTP to calculate the methanol removed per ODTP. The parameters used in the calculations will be from the representative Steam Stripping System HAP Reduction Efficiency Study.	40 CFR 63.453(i) 40 CFR 63.7
			Demonstrate daily compliance with the condensate methanol treatment requirement as a rolling 30-day average as follows: Calculate the amount of methanol removed per ODTP by dividing the total methanol removed during the preceeding 30 days by the total pulp production during that period.	40 CFR 63.7
U.11		Treatment Monitoring	The permittee shall monitor the following parameters as hourly averages: Steam to condensate feed ratio; Foul condensate feed to preheater flow (gpm); and Foul condensate outlet temperature (°F).	40 CFR 63.8
U.12		Collection and Treatment System Recordkeeping	For each applicable enclosure opening, closed vent system, and closed collection system, prepare and maintain a site-specific inspection plan, including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection: date of inspection, equipment type and identification, results of negative pressure tests for enclosures, and results of leak detection tests. In addition, if any defects or leaks are detected record: nature of the defect or leak and the method of detection, date the defect or leak was detected and the date of each attempt to repair the defect or leak, repair methods applied in each attempt to repair the defect or leak, reason for the delay if the defect or leak is not repaired	40 CFR 63.454(b) 40 CFR 63.965

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			within 15 days, expected date of successful repair of the defect or leak if the repair is not completed within 15 days, date of successful repair of the defect or leak, position and duration of opening of bypass line valves and the condition of any valve seals, and duration of the use of manual or computer-controlled bypass valves.	
U.13	HAPs	Collection and Treatment System Recordkeeping	The permittee shall maintain the following records: The condensate stream emission factors and standard deviations, and the dates on which the emission factors became effective. The steam stripping system HAP reduction efficiency equation and the date on which the equation became effective. <u>Daily Recordkeeping</u> Daily pulp production. Record the daily pounds of methanol removed. Record the total pounds of methanol removed during the preceding 30 day period. Record the total pulp production during the preceding 30 day period. Record the amount of methanol removed per ODTP for the preceding 30 days. Recordkeeping The occurrence and duration of each startup, shutdown or malfunction; The occurrence and duration of each malfunction of air pollution control equipment. All major maintenance performed on the air pollution control equipment. Actions taken during periods of startup, shutdown or malfunction when such actions are different from procedures specified in the SSM plan. Actions taken during periods of startup, shutdown or malfunction when such actions are consistent with procedures specified in the SSM plan; completed checklists or forms in an electronic database will be considered appropriate documentation. The date and time of commencement and completion of each period of excess emissions and parameter monitoring exceedences that occur during startup, shutdown or malfunction of the affected source. The date and time of commencement and completion of each period of excess emissions and parameter monitoring exceedences that occurs during periods other than startup, shutdown or malfunction of the affected source. The nature and cause of any malfunction (if known). The corrective action taken or preventive measures adopted. Each period in which a CMS is malfunctioning or inoperative (including out of control periods). All required measurements needed to demonstrate compliance with a relevant standard, as required in the relevant monitoring Condition(s).	40 CFR 63.10 40 CFR Part 63 63.10(b)(2)(i)] 63.10(b)(2)(ii) 63.10(b)(2)(iii) 63.10(b)(2)(iv) 63.10(b)(2)(v) 63.10(c)(7) 63.10(c)(8) 63.10(c)(10) 63.10(c)(11) 63.10(b)(2)(vi) 63.10(b)(2)(vii) 63.10(b)(2)(ix)

Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
		All measurements as may be necessary to determine the conditions of performance tests and performance evaluations, as required in the relevant monitoring Condition(s).	63.10(b)(2)(x)
		All CMS calibration checks.	63.10(b)(2)(xi)
		All adjustments and maintenance performed on CMS.	63.10(c)(1)
		All required CMS measurements.	63.10(c)(5)
		The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks.	63.10(c)(12)
		The nature of the repairs or adjustments to the CMS that was inoperative or out of control.	

V. Core Manufacturing Process

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
V.1	Operation	Minimum Operating Condition	The Permittee shall limit the amount of HAP in the core manufacturing operation and demonstrate compliance by the use of coating materials containing no more than 4% HAP mas of the total mass of coating materials applied each month or no more than 20 % HAP mass of the total mass coating solids applied each month.	40 CFR63.3370 Subpart JJJJ
V.2			Permittee shall maintain Material Safety Data Sheets, which indicate coating formulation and organic HAP content and/or other information describing coating formulation and organic HAP content along with a monthly log of adhesive quantities used to manufacture cores. This monthly log shall be made available from December 5, 2005.	40 CFR63.3370 Subpart JJJJ

Note: Refer to Appendix G for footnotes' definition.

FACILITY-WIDE GENERAL REQUIREMENTS [WAC 173-401-600]

These generally applicable requirements apply facility-wide, including insignificant emission units or activities. Insignificant emission units or activities, however, are not subject to monitoring, testing, recordkeeping, reporting, or compliance certification requirements.

1. Varying Emission Rate. The permittee cannot vary the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant, except as directed according to air pollution episode regulations.
[WAC 173-400-205]

2. Detrimental Emissions. The permittee shall not cause or permit emission of any contaminant if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business. [WAC 173-400-040(5)]

3. Concealment and Masking. The permittee shall not install or use any means that conceal or mask an emission of an air contaminant that would otherwise violate provisions in this permit. [WAC 173-400-040(7), 40 CFR § 60.12 for No. 3 Smelt Dissolver, No. 3 Power Boiler, No. 4 Lime Kiln, and Batch and Sawdust Digesters.]

4. Fugitive Emissions. The permittee shall take reasonable precautions to prevent the release of air contaminants from emission units engaged in material handling, construction, demolition, or any other operation that is a source of fugitive emissions. [WAC 173-400-040(3)(a)]

5. Fugitive Dust. The permittee shall take reasonable precautions to prevent fugitive dust from becoming airborne and maintain and operate the source to minimize emissions. [WAC 173-400-040(8)(a)]

6. Particulate Matter Deposition. The following condition is **state-only** and is not federally enforceable under the Clean Air Act: No deposit of particulate matter beyond property line so as to interfere unreasonably with use and enjoyment.
[WAC 173-400-040(2)]

7. Odors. The following condition is **state-only** and is not federally enforceable under the Clean Air Act: Any person causing odor which may unreasonably interfere with use & enjoyment of property must use recognized good practice and procedures to reduce odors to a reasonable minimum. [WAC 173-400-040(4)]

8. Opacity. The permittee may not cause or allow the emission of a plume from any emission unit other than a kraft recovery furnace, smelt dissolver tank, or lime kiln that has an average opacity greater than 20% for more than 6 consecutive minutes in any 60 minute period except as provided in WAC 173-405-040(6).
[WAC 173-405-040(6)]

9. Complaints. Except where specific requirements are defined elsewhere, the permittee shall assure compliance with conditions 1 through 8 by recordkeeping of actions taken by the permittee in response to complaints received by the permittee or of possible noncompliance noticed by the facility staff in day to day operation. The permittee shall assess the validity of each air quality complaint and commence corrective action, if warranted, as soon as possible but no later than 3 working days of receiving the complaint. The permittee shall keep records of the following: air quality complaints received; the assessment of validity; and what, if any, corrective action is taken in response to the air quality complaint. [WAC 173-401-630]

10. Sulfur Dioxide Emissions. The emission of sulfur dioxide from any emissions unit other than a recovery furnace or lime kiln shall not exceed 1,000 parts per million for an hourly average, corrected to 7% oxygen for combustion units.
WAC 173-405-040(11)(b) or WAC 173-400-040(6)]

11. Reserved.

12. Good Air Pollution Control Practice. The permittee shall at all times, including periods of abnormal operation and upset conditions, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to Ecology which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [WAC 173-405-040(10); 40 CFR § 60.11(d) for No. 3 Smelt Dissolver, No. 3 Power Boiler, No. 4 Lime Kiln, and Batch and Sawdust Digesters.]

13. Chemical Accidental Release Program. As a "stationary source" defined in 40 CFR § 68.3, is subject to part 68, the accidental release prevention regulations. This stationary source shall submit a risk management plan (RMP) by date specified in section 68.10. This stationary source shall certify compliance with the requirements of part 68 as part of the annual compliance certification as required by 40 CFR Parts 70 or 71. [40 CFR Part 68.3]

14. Stratosphere Ozone Protection.
    a. The permittee shall comply with applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditions (MVACs) in Subpart B:
        i. Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to § 82.156.
        ii. Equipment used during the maintenance, service, repair or disposal must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
        iii. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to § 82.161.
        iv. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to § 82.166 ("MVAC-like appliance" is defined at § 82.152.)
        v. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
        vi. Owners/operators of appliances normally containing 50 or more pounds or refrigerant purchased and added to such appliances pursuant to § 82.166.
    b. Permittee may switch from any ozone-depleting substance to any alternative approved pursuant to the Significant New Alternatives Program (SANP), 40 CFR Part 82, Subpart G, without a permit revision but shall not switch to a substitute listed as unacceptable pursuant to such program. [40 CFR 82.174]
    c. Any certified technician employed by Permittee shall keep a copy of their certification at their place of employment. [40 CFR 82.166(1)]
    d. The Permittee shall not willfully release any regulated refrigerant and shall use refrigerant extraction equipment to recover regulated refrigerant that would otherwise be released into the atmosphere. [RCW 7070.94.970(2), 970(4)] State Only
    e. Compliance with this term and condition will be demonstrated by using a certified contractor or employee.

    [40 CFR Section 82 and RCW 70.94.970 (the RCW is a **state-only** requirement)]

15. Insignificant Emission Units. The generally applicable requirements that apply to IEUs are, WAC 173-405-040(5), WAC 173-400-040, WAC 173-400-050(1) & (3), and WAC 173-400-060. [WAC 173-401-530(2)(b)]

16. Volatile Organic Liquid Storage Vessels. The permittee shall keep records showing the dimensions and capacities of all storage vessels having capacities greater than or equal to 40 cubic meters that are used to store volatile organic liquids and for which construction, reconstruction, or modification commenced after July 23, 1984. These records are to be kept for the life of each storage vessel. [40 CFR §§ 60.116b (a) and (b)]

17. Used Oil Burning. The following condition is **state-only** and is not federally enforceable under the Clean Air Act. The permittee can burn used oil only if it meets standards prescribed in RCW 70.94.610. The requirements of RCW 70.94.610(1) do not apply to used oil burned in emission units regulated under this AOP, because such emission units are "facilities permitted by the department" per RCW 70.94.610(2). [RCW 70.94.610]

18. Asbestos. The permittee shall comply with the applicable requirements of 40 CFR Part 61, subpart M (asbestos NESHAP) and WAC 173-400-075 when conducting any renovation or demolition at the facility. [WAC 173-400-075]

MONITORING, RECORDKEEPING & REPORTING

Monitoring Requirements [WAC 173-401-630(5)(b)]

19. Unit-Specific Requirements. The permittee shall conduct routine monitoring of emissions in accordance with the program of monitoring or testing required for specific emission units in conditions A through U of this permit. [WAC 173-405-072]

20. Unavoidable Excess Emissions. This condition applies to excess emissions that the permittee claimed to be unavoidable pursuant to WAC 173-400-107. The permittee may include in its reports demonstrations that excess emissions were unavoidable, consistent with the requirements of WAC 173-400-107. The permittee shall have the burden to prove that deviations from permit terms were unavoidable. Excess emissions that are unavoidable are excused and not subject to penalty. [WAC 173-400-107]

21. Violation Duration. A violation of an emission limit in this permit is presumed to commence at the time of the testing, recordkeeping or monitoring indicating noncompliance, and to continue until the time of retesting, recordkeeping or monitoring that indicates compliance. This presumption may be defeated if credible evidence shows that the violation was of longer duration, that there were intervening days during which no violation occurred or that the violation was not continuing in nature [42 U.S.C. 7413(e)(2)]. The permittee may conduct monitoring or testing more frequently than required by this permit to demonstrate compliance with an emission limit.

22. Insignificant Emission Units (IEUs). The permittee is not subject to any testing, monitoring, reporting, or recordkeeping for the insignificant emission units or activities listed [WAC 173-401-530(2)(c)].

Recordkeeping Requirements

23. Monitoring Records. The permittee shall keep records of any periodic and continuous monitoring required by this permit. These records shall include the following, where applicable:

a. The date, place as defined in requirement, and time of sampling or measurement;
b. The date(s) analysis were performed;
c. The company or entity that performed the analysis;
d. The analytical techniques or methods used;
e. The results of such analysis;

f. The operating conditions existing at the time of sampling or measurement. [WAC 173-401-615(2)(a); WAC 173-400-105; 40 CFR § 60.49b(f).]

24. Inspection Checklists. Where the permittee is required to use and maintain an inspection checklist, the checklist must contain, at a minimum, the following information:
a. The person conducting the inspection;
b. The date/time of the inspection;
c. Location of the inspection;
d. The observations made during the inspection;
e. Corrective actions taken if any; and
f. The date and time corrective action was initiated and completed.
[WAC 173-401-615(1)(b)]

25. Changes at Source. The permittee shall keep records describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. [WAC 173-401-724(5)]

26. Records Retention. The permittee shall retain records of all required monitoring data and support information for a period of 5 years from the date of monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [WAC 173-401-615(2)(c); 40 CFR § 60.49b(o)]

27. Recording Permit Deviations. The permittee shall maintain a contemporaneous record of any deviation from the requirements of this permit. [WAC 173-401-615(3)(b)]

Reporting Requirements [WAC 173-401-520, -615(3), & -710]

28. Unit Reporting Requirements. In addition to any emission unit specific reporting requirements identified below, emission unit specific requirements are identified in specific emission unit conditions of this permit.

29. Production Reporting. Report within 15 days of the end of each month average daily production of air-dried unbleached pulp. [WAC 173-405-072(4)]

30. Monthly Report. Submittal of reports of any required monitoring by this permit must be submitted to Ecology within 15 days of the end of each calendar month. [WAC 173-405-072]. The reports must clearly identify all instances of deviations from permit requirements. [WAC 173-401-615(3)(a)]

31. Emission Inventory. The permittee shall submit an inventory of emissions, as specified in WAC 173-405-078, from the source each year no later than 105 days after the end of the calendar year. The permittee shall maintain records of information necessary to substantiate any reported emissions. [WAC 173-405-078 and WAC 173-400-105(1)]

32. Permit Deviation/Excess Emissions. The permittee shall promptly submit a report of any deviations from permit conditions. [WAC 173-401-615(3)(b)]

a. For purposes of this permit, submitting a report "promptly" means the following: (a) if the deviation presents a potential threat to human health or safety, the report shall be made as soon as possible but no later than 12 hours after the discovery of the deviation; (b) for other deviations, "promptly" means that the deviations are identified in the respective monthly report.

b. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. [WAC 173-401-615(3)]. The permittee may include in its reports demonstrations that excess emissions, excursions or deviations were unavoidable, consistent with the requirements of WAC 173-400-107.

33. Certification. Any application form, report or compliance certification required to be submitted by this permit or by Chapter 401 WAC shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under Chapter 173-401 WAC shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [WAC 173-401-520]

34. Report Address: All reports and renewal applications required by this permit shall be submitted to:

Department of Ecology
Industrial Section
P.O. Box 47706
Olympia, WA 98504-7706

Compliance certification shall also be submitted to:

Environmental Protection Agency
Air Operating Permits, Region 10
1200 Sixth Avenue, OAQ-108
Seattle, WA 98101-1128

35. Compliance Requirements/Certification.

a. The permittee shall continue to comply with applicable requirements with which the permittee is in compliance;
b. The permittee shall meet applicable requirements that will become effective during the permit period on a timely basis;
c. The permittee shall submit a report to the Department of Ecology and to Region 10 of EPA within 105 days after the close of the calendar year, and every year thereafter, certifying compliance with the terms and conditions contained in this permit for the previous calendar year. The certification shall describe the following:
   i. the permit term or condition that is the basis of the certification;
   ii. the compliance status;
   iii. whether compliance was continuous or intermittent; and
   iv. the methods used for determining compliance, currently and over the reporting period consistent with required monitoring.

   Note: A report filed in a format approved by Ecology is deemed to meet the requirements of this condition.
d. The permittee is not required to certify compliance for insignificant emission units or activities. [WAC 173-401-530(2)(d), WAC 173-401-510(2)(h)(iii), and WAC 173-401-630 (5)]

STANDARD TERMS & CONDITIONS

36. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of chapter 70.94 RCW and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for potential enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [WAC 173-401-620(2)(a)]

37. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [WAC 173-401-620(2)(b)]

38. Permit Actions. This permit may be modified, revoked, reopened, and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [WAC 173-401-620(2)(c)]

39. Property Rights. This permit does not convey any property rights of any sort, or any exclusive privilege. [WAC 173-401-620(2)(d)]

40. Duty to Provide Information. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the permitting authority along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205. [WAC 173-401-620(2)(e)]

41. Permit Fees. The permittee shall pay fees as a condition of this permit in accordance with the permitting authority's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as prescribed in chapter 70.94 RCW. [WAC 173-401-620(2)(f)]

42. Emissions Trading. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit. [WAC 173-401-620(2)(g)]

43. Severability Clause. If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable. [WAC 173-401-620(2)(h)]

44. Permit Appeals. The permittee may appeal this permit or any conditions in it only by filing an appeal with the pollution control hearings board and serving it on the permitting authority within thirty days of receipt pursuant to RCW 43.21B.310. This provision for appeal in this section is separate from and additional to any federal rights to petition and review under § 505(b) of the FCAA. [WAC 173-401-620(2)(i)]

45. Permit Continuation. This permit is issued for a 5 year term; however, this permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted. An application shield granted pursuant to WAC 173-401-705(2) shall remain in effect until the renewal permit has been issued or denied if a timely and complete application has been submitted. [WAC 173-401-620(2)(j)]

46. Application and Issuance of a Renewal Permit. The permittee shall submit a complete permit renewal application to Ecology no later than six months, but no earlier than 18 months, prior to the expiration

date of the existing permit. Permits being renewed are subject to the same procedural requirements, including those for public participation, affected state and EPA review that apply to the initial permit. [WAC 173-401-710(1)&(2)]

47. Inspection and Entry. The permittee shall allow the permitting authority or an authorized representative to perform the following upon presentation of credentials and other documents as may be required by law:
   a. Enter upon the permittee's premises where a chapter 401 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
   c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
   d. As authorized by WAC 173-400-105 and the FCAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

   [WAC 173-401-630(2)]

48. Federally Enforceable Requirements. All terms and conditions of this permit, including any provisions designed to limit potential to emit, are enforceable by EPA and citizens under the FCAA, unless they are specifically designated as not federally enforceable. [WAC 173-401-625]

49. Reopening for Cause. This permit shall be reopened and revised under any of the following circumstances:
   a. Additional applicable requirements become applicable when the remaining permit term is greater than three years. Such reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to WAC 173-401-620(2)(j).
   b. Additional requirements (including excess emissions requirements) become applicable under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated in the permit.
   c. Ecology determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
   d. Ecology determines that the permit much be revised or revoked to assure compliance with the applicable requirements.

   Procedures to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. [WAC 173-401-730]

50. Tampering and false statements. No person shall make any false materials statement, representation or certification in any form, notice or report required in this permit. No person shall render inaccurate any monitoring device or method required under this permit. [WAC 173-400-105(7) and (8) and 40 CFR 70.11(a)]

51. Providing Additional Data. For Ecology to evaluate a plant's emissions or emission control program, the permittee shall furnish other data requested by Ecology. [WAC 173-405-072(5)]

PERMIT SHIELD

Pursuant to WAC 173-401-640(1), compliance with the terms and conditions of this permit shall be deemed compliance with the applicable requirements identified in this permit, as of the date of permit issuance. This permit shield does not exempt the permittee from requirements enacted after the permit issuance date. This permit shield shall not apply to any insignificant emission unit or activity designated under WAC 173-401-530. [WAC 173-401-530(3)]

Pursuant to WAC 173-401-640(2), the Department of Ecology has determined that the requirements listed below do not apply to the facility, as of the date of permit issuance, for the reasons specified.

APPENDIX A
Permit Shield/Inapplicable Requirements

Appendix A
Permit Shield/Inapplicable Requirements
Georgia Pacific Camas Mill

Citation	Source/Topic/Parameter	Basis for Determining its Inapplicability
WAC 173-400-040(1)	Not >20% opacity for 3 minutes in any one hour (four exceptions; (a) soot blowing/grate cleaning (b) uncombined water (c) common stack (d) alternate limit set)	WAC 173-405 and 173-410 provide specific standards that take precedence over general standards.
WAC 173-400-040(8)(b)	Fugitive dust sources identified as significant contributors to PM10 non-attainment must apply RACT	This regulation is not applicable to the source. The mill is not in a non-attainment area and has not therefore been identified as a significant contributor to a PM10 non-attainment problem.
WAC 173-400-045	Sources subject to a RACT determination must pay fees as specified	This regulation is not applicable to the source. The mill has not been identified as a source subject to a RACT determination.
WAC 173-400-075	Sources of arsenic, beryllium, benzene, mercury, radio nuclides or vinyl chloride	This regulation is not applicable to the source. The mill has not identified sources corresponding to this regulation.
40 CFR 61, Subpart E	Stationary sources which process mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge.	The mill burns sludge from its primary wastewater treatment plant with its woodwaste. However, this boiler is defined as a woodwaste boiler, not a sludge incinerator. Sludge is an incidental and minor fuel and is burned for energy recovery, not disposal. Combustion units at industrial facilities that burn materials such as sludge for energy recovery purposes are not considered solid waste incineration units under both federal and state regulations. See 70 Fed. Reg. 55568 (Sept 22, 2005). The mercury emission standard (40 CFR 61.52) specifically applies to mercury ore processing facilities, mercury cell chlor-alkali plants, sludge incineration plants, and sludge drying plants, not to woodwaste boilers. In any case, chemical analysis of the emissions shows potential emissions of 0.0176 pounds/day of mercury well below the 7.1 pounds/day NESHAP limit and below the 3.5 pounds/day repeat testing threshold defined in the rule.
WAC 173-400-105(5)(d)	Opacity monitoring required for wood residue fuel fired steam generators with capacity of ≥ 100 million BTU/hr heat input, which are not subject to an NSPS	No. 3 Power Boiler which fires wood residue is subject to NSPS, this regulation does not apply.
WAC 173-400-151	Retrofit requirements for visibility protection--must apply BART	The mill points out that the No. 4 Power Boiler may be impacted by BART. EPA and Ecology will designate affected sources and the regulation may apply to other emission units.
WAC 173-405-040(1)(b)	TRS limit of 17.5 ppm applies for DCE Kraft recovery furnaces or constructed before 1/1/70	This regulation is not applicable to the source. The mill has not identified sources corresponding to this regulation.

WAC 173-405-072 (1), (2), (3), (4)	Monitoring requirements	PSD-88-3 MOD2 and DE88-360-MOD2 include specific monitoring requirements which take precedence over WAC 173-405-072.
40 CFR § 60.283(a)(1)	TRS emissions < 5ppm corrected to 10% oxygen unless controlled using one of the methods listed and other provisions of this section are met -- North brown stock washers.	Brown stock washers are not subject to NSPS. EPA Region X and Ecology exempted them on May 31, 1996 and September 18,1981. The exemption was granted based on the economically infeasible determination by the agencies. In April 2005 the washers were collected by the High Volume Low Concentration (HVLC) system and are being incinerated in either the No. 3 or No. 4 Kraft recovery furnace.
40 CFR § 60.284(a)(2) 40CFR § 60.7	CEM for TRS emissions	Brown stock washers are not subject to NSPS. The EPA Region X and Ecology exempted them on May 31, 1996 and September 18, 1981. The exemption was granted based on the economically infeasible determination by the agencies. . In April 2005 the washers were collected by the High Volume Low Concentration (HVLC) system and are being incinerated in either the No. 3 or No. 4 Kraft recovery furnace.
WAC 173-422-030	Motor vehicle emission inspection	Not applicable to stationary sources.
40 CFR 63.453 (c) (2)	Monitoring requirements for bleaching systems	Mill uses a alternative parameter to gas flow to demonstrate continuous compliance.
40 CFR 63.453 (k) (1) 40 CFR 63.453 (k) (2)	Monitoring performed at least once every 30 days	Mill performs monthly to demonstrate compliance.
40 CFR 63.864 (e)	Monitoring requirements for chemical recovery combustion sources at Kraft mills. For ESP opacity monitoring system required.	Mill is unique in that the ESP for the No. 3 and No. 4 Kraft recovery furnaces is followed by a cross-flow scrubber. Mill monitors secondary power of ESP and scrubber parameters for the No. 3 Kraft Recovery Furnace and secondary power of ESP for the No. 4 Kraft Recovery Furnace to demonstrate continuous compliance.

Appendix A
Permit Shield/Inapplicable Requirements
Georgia Pacific Camas Mill
(Continued)

Citation	Source/Topic/Parameter	Basis for Determining its Inapplicability
WAC 173-433	Solid fuel burning devices	This regulation is intended to apply to wood stoves and fireplaces only according to advice from Ecology.
WAC 173-435	Emergency Episode Plan	Ecology has not requested a plan per our records.
WAC 173-470, 474, 475, 480, 481	Ambient Air Quality Standards	Ambient air quality standards (AAQS) do not apply directly to stationary sources.
RCW 70.94.531	Commute trip reduction	This regulation is not applicable to stationary sources.

APPENDIX B
(Reserved)

APPENDIX C
Algorithms for Emission Calculations

These following algorithms set forth the calculation method for those emission limits that the designated Reference Method itself does not yield a direct emission measurement. The permittee may use an equivalent method with written approval from Ecology.

A. Reference Method Dependent Emission Limits

Conditions A.4 and B.4

Calculation of NO_x for No. 3 and No. 4 Kraft Recovery Furnaces (use the most recent source tests that include 9 separate test runs)

Mass Emission Rate (MER) = F(x) * C(x) * Q_{sd}

Where,
F(x) = unit conversion factor for NOx = 1.1963 E^{-7}
C(x) = concentration of NOx in flue gas in µl/l (ppm dry basis v/v)
Q_{sd} = volumetric flow rate of gas (dry basis) corrected to standard conditions, dscf/hr

Emission Factor for the No. 4 Kraft Recovery Furnace is calculated as follows:

E.F. (NOx Emission Factor) = Mass Emission Rate (MER)*Unit Conversion Factor / BLS burned

Where,
MER = Mass Emission Rate of NOx in lb/hr
Unit Conversion Factor is case specific. For Example, 1 ton = 2000 lbs.
BLS = Rate of Black Liquor Solids burned in lb/hr

Conditions C.1, F.1, G.2, H.2, I.2, and L.2

PM (mass per time) = Concentration * Air Flow Rate * Unit Conversion Factor * Time Adjustment

Where;
Concentration is Reference Method (RM) dependent. For example, RM 5 yields particulate emission in terms of grains per dry standard cubic foot (gr/dscf).
Air Flow Rate must be representative of normal operations and is derived from the applicable RM in terms of dry standard cubic feet per minute.
Unit Conversion Factor is case specific. For example; 1 pound = 7,000 grains.
Time Adjustment is case specific and is dependent on the flow rate time unit or fuel flow rate.

The monthly values (monthly, quarterly, or other test frequency, whichever applicable) for the year will be summed to determined the annual average at the end of the calendar year.

Conditions F.2 and I.4

SO_2 (mass per time) = SO_2 Emission Factor * Fuel Consumption Rate

Where,
Emission Factor derived from the most recent stack test results (9 most recent separate test runs). For example, sulfur dioxide emissions from the smelt dissolver vents measured using EPA Method 6C.
Fuel Consumption Rate must be representative of normal operations and is in the unit of mass of fuel consumption per unit time.

Conditions C.3, G.6

NOx (mass per time) = NO_X Emission Factor * Fuel Consumption (or Material Produced)

Where,
Emission Factor derived from the most recent actual stack test results (9 most recent separate test runs). For example, nitrogen oxide emissions from the lime kiln measured using EPA Method 7, 7A, or 7B.
Fuel Consumption Rate must be representative of normal operations and is in the unit of mass of fuel consumption or material produced per unit time. For example, the annual production of calcium oxide from calcium carbonate at the lime kiln is used to estimate the NO_x emissions.

Condition H.6

NOx emissions will be calculated by a parametric emission modeling equation below. The equation was evaluated in term of Relative Acuracy (RA) as defined in 40 CFR 60, Appendix B, Performance Specifications 2. Acceptance criteria concerning the modeling equation is defined as RA less than or equal to 20%. The RA computation method is in accordance with EPA procedures available online at http/wwwepa.gov/docs/epacfr40/chapt1.info/. QA/QC procedures are detailed in Section Q of this permit.

NOx = 0.3979*Steam Rate + 5.796*Excess Oxygen + 0.4313*Oil Firing Rate + 0.341*FGR - 0.0006318*NCG Flow Rate + 0.02749*SOG - 70.12

Where,
NO_x = pounds per hour
Steam Rate = Steam generation in thousands of pounds per hour (kpph)
Excess Oxygen = Boiler excess oxygen in percent (%)
Oil Firing Rate in gallons per minute
FGR = Flue Gas Recirculation Rate in thousands of pounds per hour (kpph)
NCG = Non-condensible gas flow rate in cubic feet per minute (cfm)
SOG = Stripper off-gas flow rate in actual cubic feet per minute (acfm)

Conditions C.4, G.7, H.8, and I.6

CO (mass per time) = CO Emission Factor * Fuel Consumption (or Material Produced)

Where,
Emission Factor derived from the most recent actual stack test results (9 most recent separate test runs). For example, carbon monoxide emissions from the kraft recovery furnaces measured using EPA Method 10.
Fuel Consumption Rate must be representative of normal operations and is in the unit of mass of fuel consumption or material produced per unit time. For example, the annual production of calcium oxide from calcium carbonate at the lime kiln is used to estimate the CO emissions.

Conditions C.5, F.3, G.8, H.9, and I.7

VOC (mass per time) = VOC Emission Factor * Fuel Consumption (or Material Produced)

Where,
Emission Factor derived from the most recent stack test results (9 most recent separate test runs). For example, VOC emissions from the kraft recovery furnaces measured using EPA Method 25A.
Fuel Consumption Rate must be representative of normal operations and is in the unit of mass of fuel consumption or material produced per unit time. For example, the annual production of calcium oxide from calcium carbonate at the lime kiln is used to estimate the VOC emissions.

Conditions F.4

TRS (mass per time) = TRS Emission Factor * Fuel Consumption

Where,
Emission Factor derived from the most recent stack test results (9 most recent separate test runs). For example, TRS emissions from the kraft recovery furnaces measured using EPA Method 16 or 16A.
Fuel Consumption Rate must be representative of normal operations and is in the unit of mass of fuel consumption.

B. CEM Dependent Emission Limits

Condition C.2, G.5, and H.5

SO_2 (mass per time) = Concentration * Air Flow Rate * Unit Conversion Factor * Time Adjustment

Where,
Concentration is case specific in terms of averaging period as required by the permit. Each emission unit limitation specifies the averaging period used by the CEMS. For example, the CEM on the No. 4 Recovery Furnace derives a 1-hour averages. The 1-hour average will be measured based on EPA Method 6C.
Air Flow Rate must be representative of normal operation. For example, dry standard cubic feet per minute is obtained from the previous six consecutive particulate matter (PM) sampling periods.
Unit Conversion Factor is pollutant specific and involves molar mass and molar volume. For example, the unit conversion factor for SO2 is 64 lb/lb.mole and an ideal gas of volume at standard conditions of 385 cubic feet.
Time Adjustment is case specific and is dependent on the flow rate time unit.

The monthly values for the year will be summed to determine the annual average at the end of the calendar year.

Condition I.5

NO_x (mass per time) = Concentration * Fuel Consumption

Where,
Concentration is derived from CEM in terms of lb/MMBtu.
Fuel Consumption must be representative of normal operations and is in the unit of mass of fuel consumption. For example, the annual throughput of hog fuel of the No.3 Power Boiler is used to estimate the NO_x emissions.

Condition C.6, G.10, and H.10

TRS (mass per time) = Concentration * Air Flow Rate * Unit Conversion Factor * Time Adjustment

Where,
Concentration is case specific in terms of averaging period as required by the permit. Each emission unit limitation specifies the averaging period used by the CEMS.
Air Flow Rate must be representative of normal operation. For example, dry standard cubic feet per minute is obtained from the average of the last six consecutive PM sampling periods.
Unit Conversion Factor is pollutant specific and involves molar mass and molar volume. For example, the unit conversion factor for TRS as H_2S is 0.0883 lb per cubic foot based on a molecular weight of 34 lb/lb mol and an ideal gas volume of standard conditions of $385ft^3$/lb mol.

Time Adjustment is case specific and is dependent on the flow rate time unit.

The monthly values for the year will be summed to determined the annual average at the end of the calendar year.

APPENDIX D
Applicable Requirements Consolidated to Single Permit Terms

Certain permit conditions impose a single emission limit or requirement that is based on two or more underlying applicable requirements. This table presents the basis for consolidating these redundant requirements into single permit conditions.

No. 3 Kraft Recovery Furnace (Emission Unit Specific Requirements, A.)
Note: This unit is not subject to New Source Performance Standard Subpart BB

Limit #	**Underlying Applicable Requirements – Cite and Paraphrase of Requirement**	**Basis for Consolidating**
A.1	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: Particulate limit (PM_{10}) is 0.033 gr/dscf @ 8% O_2, avg. three 1-hour runs; EPA Method 5. **WAC 173-405-040(1)(a)**: Particulate limit is 0.10 gr/dscf @ 8% O_2, avg. three 1-hour runs; approved EPA or Ecology test methods.	Permit imposes the more stringent 0.033 gr/dscf limit from the PSD/NOC approval.
A.2	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: Opacity limit is 20% for more than 6 consecutive minutes in any 60 minute period. **WAC 173-405-040(6)**: Opacity limit is 35% for more than 6 consecutive minutes in any 60 minute period.	Permit imposes the more stringent 20% opacity limit from the PSD/NOC approval.
A.3	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: SO_2 limit is 10 ppm @ 8% O_2, 24-hour avg.; EPA Method 6 0r 6c. **WAC 173-405-040(11)**: SO_2 limit is 500 ppm @ 8% O_2, hourly avg.; approved EPA or Ecology test methods.	Permit imposes 10 ppm limit, which is more stringent than and encompasses the 500 ppm limit (impossible to emit up to 500 ppm in one hour and still meet 10 ppm 24-hour avg. limit).
A.5	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: TRS limit is 5 ppm @ 8% O_2, 12-hour average; EPA Method 16 or 16A. **WAC 173-405-040(1)(c)**: limit is 5 ppm @ 8% O_2, daily average; approved EPA or Ecology test methods.	Permit imposes the more stringent 5 ppm limit and 12-hour averaging period from PSD/NOC approval.

No. 4 Kraft Recovery Furnace (Emission Unit Specific Requirements, B.)
Note: This unit is not subject to New Source Performance Standard Subpart BB

Limit #	**Underlying Applicable Requirements – Cite and Paraphrase of Requirement**	**Basis for Consolidating**
B.1	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: Particulate limit (PM_{10}) is 0.033 gr/dscf @ 8% O_2, avg. three 1-hour runs; EPA Method 5.	Permit imposes the more stringent 0.033 gr/dscf limit from the PSD/NOC approval.

	WAC 173-405-040(1)(a): Particulate limit is 0.10 gr/dscf @ 8% O_2, avg. three 1-hour runs; approved EPA or Ecology test methods.	
B.2	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: Opacity limit is 20% for more than 6 consecutive minutes in any 60 minute period. **WAC 173-405-040(6)**: Opacity limit is 35% for more than 6 consecutive minutes in any 60 minute period.	Permit imposes the more stringent 20% opacity limit from the PSD/NOC approval.
B.3	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: SO_2 limit is 10 ppm @ 8% O_2, 24-hour avg.; EPA Method 6 0r 6c. **WAC 173-405-040(11)**: SO_2 limit is 500 ppm @ 8% O_2, hourly avg.; approved EPA or Ecology test methods.	Permit imposes 10 ppm limit, which is more stringent than and encompasses the 500 ppm limit (impossible to emit up to 500 ppm in one hour and still meet 10 ppm 24-hour avg. limit).
B.5	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: TRS limit is 5 ppm @ 8% O_2, 12-hour average; EPA Method 16 or 16A. **WAC 173-405-040(1)(c)**: limit is 5 ppm @ 8% O_2, daily average; approved EPA or Ecology test methods.	Permit imposes the more stringent 5 ppm limit and 12-hour averaging period from PSD/NOC approval.

No. 3 Smelt Dissolver Tank (Emission Unit Specific Requirements, D.)

Limit #	**Underlying Applicable Requirements – Cite and Paraphrase of Requirement**	**Basis for Consolidating**
D.1	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: Particulate limit (PM_{10}) is 0.12 lb/ton of black liquor solids (BLS) dry weight, hourly average of three one-hour runs; Method 5. **40 CFR § 60.282(a)(2)**: Particulate limit is 0.2 lb/ton of BLS dry weight; Method 5. **WAC 173-405-040(2)**: Particulate limit is 0.3 lb/ton of BLS dry weight; approved EPA or Ecology test methods.	Permit imposes limit from the PSD/NOC approval, which has a more stringent lb/ton limit.
D.2	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: Opacity limit is 20% for more than 6 consecutive minutes in any 60 minute period. **WAC 173-405-040(6)**: Opacity limit is 35% for more than 6 consecutive minutes in any 60 minute period.	Permit imposes the more stringent 20% opacity limit from the PSD/NOC approval.
D.3	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: TRS limit is 0.0168 lb/ton of black liquor solids, daily average; EPA Method 16A or 16C. **40 CFR § 60.283(a)(4)**: TRS limit is 0.033 lb/ton of black liquor solids; EPA Method 16.	Permit imposes the more stringent 0.0168 lb/ton limit from the PSD/NOC approval.
D.4	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: Requires, as performance indicators, that hourly average pressure drop through the wet scrubber be at least 3 inches of water and flow rate through the first stage of the scrubber be least 2000 gallons per minute at a minimum pH of 9, , based on continuous monitoring while operating. **40 CFR § 60.284(b)(2)**: Requires monitoring device to continuously measure pressure loss and scrubbing liquor supply.	PSD/NOC approval encompasses NSPS requirement to monitor and adds specific scrubber parameters.

No. 4 Smelt Dissolver Tank (Emission Unit Specific Requirements, E.)
Note: This unit is not subject to New Source Performance Standard Subpart BB

Limit #	**Underlying Applicable Requirements – Cite and Paraphrase of Requirement**	**Basis for Consolidating**
E.1	**PSD-88-3 Modification 2 & DE-88-360 Modification 2:** Particulate limit (PM_{10}) is 0.12 lb/ton of black liquor solids dry weight, hourly average of three one-hour runs; DOE Method 8. **WAC 173-405-040(2):** Particulate limit is 0.3 lb/ton of black liquor solids dry weight; approved EPA or Ecology test methods.	Permit imposes the more stringent 0.12 lb/ton limit from the PSD/NOC approval.
E.2	**PSD-88-3 Modification 2 & DE-88-360 Modification 2:** Opacity limit is 20% > than 6 consecutive minutes in any 60 minute period. **WAC 173-405-040(6):** Opacity limit is 35% for > 6 consecutive minutes in any 60 minute period.	Permit imposes the more stringent 20% opacity limit from the PSD/NOC approval.

No. 4 Lime Kiln (Emission Unit Specific Requirements, G.)

Limit #	Underlying Applicable Requirements – **Cite and Paraphrase of Requirement**	**Basis for Consolidating**
G.1	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: Particulate limit (PM_{10}) is 0.13 gr/dscf @ 10% O_2 when firing with fuel oil, 0.067 gr/dscf @ 10% O_2 when firing with natural gas; DOE Method 8. **40 CFR § 60.282(a)(3)**: Particulate limit is 0.13 gr/dscf @ 10% O_2 when firing with fuel oil, 0.067 gr/dscf @ 10% O_2 when firing with natural gas; EPA Method 5. **WAC 173-405-040(1)(a)**: Particulate limit is 0.13 gr/dscf @ 10% O_2; approved EPA or Ecology test methods.	Permit imposes PSD/NOC approval limit, which is equivalent NSPS limit and more stringent than WAC limit, while requiring use of more stringent test method than the NSPS (Meth. 8 measures both front & back half catch; Meth. 5 only front half).
G.3	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: Opacity limit is 35% for > 6 consecutive minutes in any 60 minute period. **WAC 173-405-040(6)**: Opacity limit is 35% for more than 6 consecutive minutes in any 60 minute period.	Permit imposes the similar 35% opacity limit as the PSD/NOC approval.
G.9	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: TRS limit is 8 ppm dry basis @ 10% O_2 on a 12-hour average; EPA Method 16 or 16A. **40 CFR § 60.283(a)(5)**: TRS limit is 8 ppm dry basis @ 10% O_2 on a 12-hour average; EPA Method 16 or 16A. **WAC 173-405-040(3)(c)**: limit is 20 ppm @ 8% O_2 on a daily average; approved EPA or Ecology test methods.	Permit imposes the 8 ppm limit from the PSD/NOC approval, which is equivalent to the NSPS requirement and more stringent than the WAC requirement.
G.10	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: Requires, as performance indicators, that hourly average pressure drop through the wet scrubber be at least 24 inches of water and flow rate through the first stage of the scrubber be least 380 gallons per minute, based on continuous monitoring while operating. **40 CFR § 60.284(b)(2)**: Requires monitoring device to continuously measure pressure loss and scrubbing liquor supply.	PSD/NOC approval encompasses NSPS requirement to monitor and adds specific scrubber parameters.

No. 3 Power Boiler (Emission Unit Specific Requirements, I.)

Limit #	**Underlying Applicable Requirements – Cite and Paraphrase of Requirement**	**Basis for Consolidating**
I.1	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: Particulate limit (PM_{10}) is 0.01 gr/dscf @ 7% O_2, hourly average; EPA Method 5. **40 CFR § 60.43b(c)(1)**: No particulate matter in excess of 0.10 lb/million Btu heat input; EPA Method 5, 5B or 17. **WAC 173-405-040(5)(b)**: Particulate limit is 0.05 gr/dscf @ 7% O_2; approved EPA or Ecology test methods.	Permit uses the PSD/NOC approval limit of 0.01 gr/dscf, which is more stringent than the other two limits. WAC limit is in same terms and is less stringent. NSPS limit is approximately equivalent to 0.05 gr/dscf, which is less stringent.
I.3	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: Opacity limit is 20% for > 6 consecutive minutes in any 60 minute period. **40 CFR § 60.43b(f)**: 20% opacity, 6-minute avg., except for one 6-minute period per hour of ≤ 27% opacity. **WAC 173-405-040(6)**: Opacity limit is 20% for > 6 consecutive minutes in any 60 minute period, except uncombined water is only reason for opacity exceedance.	Permit imposes the 20% limit from the PSD/NOC approval.
I.5	**PSD-88-3 Modification 2 & DE-88-360 Modification 2**: NO_x limit is 0.25 lb/MM BTU heat input, 30-day rolling average; monitor continuously using approved CEM conforming to 40 CFR § 60, App. B & F, Perf. Spec. 2. **40 CFR § 60.44b(d)**: NO_x limit is 0.30 lb/MM BTU; 30-day rolling average.	Permit imposes the more stringent 0.25 lb/MMBtu limit from the PSD/NOC approval.

No. 5 Power Boiler (Emission Unit Specific Requirements, H.)
Note: This unit is not subject to New Source Performance Standard Subpart D and Db

Limit #	**Underlying Applicable Requirements – Cite and Paraphrase of Requirement**	**Basis for Consolidating**
H.1	**DE-1147**: Particulate limit (PM_{10}) is 0.0164 gr/dscf; EPA Method 5. **WAC 173-405-040(5)(b)**: Particulate limit is 0.05 gr/dscf; approved EPA or Ecology test methods.	Permit uses the NOC approval limit of 0.0164 gr/dscf, which is more stringent than the other two limits. WAC limit is in same terms and is less stringent. NSPS limit is approximately equivalent to 0.05 gr/dscf, which is less stringent.
H.3	**DE-1147**: Opacity limit is 20% for > 6 consecutive minutes in any 60 minute period. **WAC 173-405-040(6)**: Opacity limit is 20% for > 6 consecutive minutes in any 60 minute period, except uncombined water is only reason for opacity exceedance.	Permit imposes the 20% limit from the NOC approval.
H.4	**DE-1147**: SO_2 limit is 16.6 ppm @ 7% O_2, 24-hour avg.; EPA Method 6 0r 6c. **WAC 173-405-040(11)**: SO_2 limit is 1000 ppm @ 7% O_2, hourly avg.; approved EPA or Ecology test methods.	Permit imposes 16.6 ppm limit, which is more stringent than and encompasses the 1000 ppm limit.

APPENDIX E
Glossary of Terms Used in the Air Operating Permit

Annual average. In defining the averaging period of a particular limit, annual average means the calendar year average. Determining compliance with a limit with an annual average shall be based on the unit's operation for a calendar year.

Calendar year average. The calendar year average is the average value of a given parameter over the period beginning on January 1 and ending on December 31.

Intermittent compliance. For the purpose of annually certifying compliance, the permittee is considered to be in intermittent compliance with a permit term or condition if it is not in continuous compliance with the permit term or condition during the annual certification period.

Named streams. means the pulping process condensates from the equipment systems listed below [40 CFR 63.446(b)] . Named streams specific to the facility addressed by this permit are specified in Emission Unit Specific Requirements, U.

Each digester system;
Each evaporator system condensate from:
The vapors from each stage where weak liquor is introduced (feed stages); and
Each evaporator vacuum system for each stage where weak liquor is introduced (feed stages).
Each HVLC collection system.

Operating/in operation. In operation means engaged in activity related to the primary design function of the source. For example, a straight recovery furnace is in operation only when combusting black liquor, and a lime kiln is in operation only when feeding lime mud.

Rolling Annual Average. In defining the averaging period of a particulate emissions limit, the rolling annual average means the average of the emissions readings of the previous year leading up to the reporting date. For a rolling annual average limit with an associated monthly reporting requirement, the rolling annual average is a 12-month rolling average, calculated monthly. The need for this term is necessitated by the possibility of different reporting frequencies for a single emissions limit, based on the performance of the unit compared to the permit limit.

60-minute period. The period from the top of one hour to the top of the next hour (e.g., 07:00:00 to 07:59:59).

Visual opacity assessment. A visual opacity assessment as used in this permit, is the use of an observer trained in general procedures for determining visible emissions, which could include DOE Method 9B or EPA Method 9. A trained observer does not need to have current certification in Method 9B. Under normal conditions, a trained observer will be present at the facility, while a certified Method 9B observer is not always readily available.

APPENDIX F

Footnote Keys

[1] Monitoring is required only when emission unit is operating.

[2] If monitored emissions are equal to or less than 75% of the emission limitation for any six consecutive months, emissions will be monitored by three 1-hour test per quarter and reported quarterly. There shall be no more than 105 days between each quarterly test. If monitored emissions are greater than 75% of the emission limitation in any of the previous six months, the monitoring and reporting frequency will be as stated in the tables. The permit conditions that affected are A.1, B.1, D.1, E.1, G.1, H.1, and I.1.

[3] CMS Data Recovery. State and federal regulations recognize that monitoring data may be lost for legitimate reasons. The permittee may be exempted from monitoring and reporting requirements during periods of monitoring system malfunctions, provided that the permittee shows that the malfunction was unavoidable and is being repaired as expeditiously as practicable. [40 CFR §60.13(e); 40 CFR 63.8(c)(4); WAC 173-400-105(5)(h); WAC 173-405-077]

The permittee shall make every effort to acquire, maintain, and recover valid monitoring data. CMS downtime and resulting monitoring data loss due to malfunctions shall be less than 10% of the monthly unit operating time. An acceptable explanation for the loss of monitoring data must be provided in the monthly report. Periods when CMS data is not recovered due to daily calibration, zero and span checks are not considered nor reported as CMS downtime in the monthly report. Records of daily calibration, zero and span checks shall be kept for a period of five years and made available upon request to Ecology. [WAC 173-401-615(1)(c); WAC 173-401-630(1)]

[4] MACT CMS Performance Reports. The permittee shall record and report CMS downtime in the semi-annual MACT report. [40 CFR 63.10(e)]

[5] NSPS CMS Performance Reports. The permittee shall record and report CMS downtime in the monthly report. [40 CFR §60.7(c) and (d) (2/12/99)]

[6] WA PSD/NSR/SIP CMS Performance Reports. The permittee shall record and report CMS downtime, other than calibration, zero and span checks, in the monthly report. In the case of monitor downtime due to system malfunctions, the report will address whether the malfunction was unavoidable, and repaired as expeditiously as practicable. [WAC 173-400-105(5)(h); WAC 173-405-077; WAC 173-401-615(1)(c); WAC 173-401-630(1)]

[7] See Condition T.1 and T.11. During periods when the HVLC sources are collected but not incinerated due to the unavailability of the control device, venting is allowed by § 63.443(e) and § 63.450(d). The HVLC gases will be vented to the No. 3 Recovery Furnace and/or No. 4 Recovery Furnace stacks. The HVLC gases are discharged downstream from the furnace but upstream of the continuous emission monitoring (CEM) system. During these venting periods, excess emissions shall not be a violation according to § 63.443(c) and (d) provided that the time of excess emissions does not exceed four percent of the total operating time of the HVLC system in a semi-annual reporting period. Permittee in addition shall install a flowmeter in a representative location on the HVLC line that complies with § 63.450(d). For the purpose of calculating the compliance with the TRS limit of the No.3 and/or No. 4 Recovery Furnace, the concentrations recorded by the in-stack CEMS and the time period during which HVLS gases vented may be excluded from 12-hour TRS average emission rate. Permittee shall comply with requirements of §.63.443(e)(2) and Condition T.3 of this AOP Permit.

[8] There shall be no visible emissions other than water vapor from the cyclone stacks. Visible emissions acknowledge the potential presence of unquantified but negligible and not visible concentrations of particulate.

[9] HVLC system compliance date April 17, 2006.

APPENDIX G : Existing Orders and Permits

Order DE-1147-AQ04
PSD-88-3/Modification 2
Order DE-88-360/Modification 2
Order DE-96-AQ-I059
Order DE-95-AQ-I050
Order DE-93-AQ-I140
Order DE-87-309